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Automated Report

Technical Report for

Arcadis-US, Inc

Castner Range; Ft Bliss, TX

06261038.0000

SGS Accutest Job Number: FA33720

Sampling Dates: 05/04/16 - 05/05/16



Report to:

Arcadis-US, Inc
401 E Main St Suite 400

(b) (6)

Total number of pages in report: 206

(b) (6)

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

(b) (6)

Certifications: FL (E83510), LA (03051), KS (E-10327), IA (366), IL (200063), NC (573), NJ (FL002), SC (96038001)
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Sample Summary

Arcadis-US, Inc

Job No: FA33720

Castner Range; Ft Bliss, TX
Project No: 06261038.0000

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA33720-1	05/04/16	10:40	AG	05/06/16	SO	Soil	FTBL-SED-49-0-6-050416-QA
FA33720-2	05/05/16	11:00	AG	05/06/16	SO	Soil	FTBL-SED-34-0-6-050516-QA

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Arcadis-US, Inc **Job No:** FA33720

Site: Castner Range; Ft Bliss, TX **Report Date:** 5/18/2016 10:44:22 AM

2 Sample(s) were collected on/between 05/04/2016 and 05/05/2016 and were received at SGS Accutest Southeast (SASE) on 05/06/2016 properly preserved, at 4.5 Deg. C and intact. These Samples received an SASE job number of FA33720. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Metals By Method SW846 6010C

Matrix: SO **Batch ID:** MP30349

All samples were digested within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA33828-1DUP, FA33828-1MS, FA33828-1MSD, FA33828-1PS, FA33828-1SDL were used as the QC samples for metals.

Matrix Spike/Matrix Spike Duplicate Recovery(s) for Antimony, Zinc are outside control limits. Probable cause is due to matrix interference.

Matrix Spike/Matrix Spike Duplicate Recovery(s) for Copper are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

RPD(s) for Duplicate for Antimony are outside control limits for sample MP30349-D1. RPD acceptable due to low duplicate and sample concentrations.

RPD(s) for MSD for Copper are outside control limits for sample MP30349-S2. High RPD due to possible sample non-homogeneity.

RPD(s) for Serial Dilution for Antimony, Arsenic, Beryllium, Copper, Nickel, Zinc are outside control limits for sample MP30349-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

Sample(s) FA33720-1, FA33720-2 are for Antimony, Arsenic, Beryllium, Lead, Nickel, Zinc, Antimony, Copper have elevated reporting limit(s) due to matrix interference.

MP30349-S1 for Antimony: Spike recovery indicates possible matrix interference and/or sample non-homogeneity.

MP30349-S1 for Zinc: Spike recovery indicates possible matrix interference and/or sample non-homogeneity.

MP30349-SD1 for Copper: Serial dilution indicates possible matrix interference.

MP30349-SD1 for Nickel: Serial dilution indicates possible matrix interference.

MP30349-SD1 for Zinc: Serial dilution indicates possible matrix interference.

Wet Chemistry By Method SM19 2540G

Matrix: SO **Batch ID:** GN70945

Sample(s) FA33720-2DUP were used as the QC samples for Solids, Percent.

SGS Accutest (SASE) certifies that this report meets the project requirements for analytical data produced for the samples as received at SASE and as stated on the COC. SASE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the SASE Quality Manual except as noted above. This report is to be used in its entirety. SASE is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

Date: May 18, 2016

[redacted] Client Services (signature on file)

Summary of Hits

Job Number: FA33720
Account: Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX
Collected: 05/04/16 thru 05/05/16

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
FA33720-1	**FTBL-SED-49-0-6-050416-QA**					
Arsenic [a]		6.0	1.5	0.77	mg/kg	SW846 6010C
Beryllium [a]		0.77	0.77	0.15	mg/kg	SW846 6010C
Copper		13.5	0.96	0.077	mg/kg	SW846 6010C
Lead [a]		50.7	3.1	0.62	mg/kg	SW846 6010C
Nickel [a]		8.6	6.2	0.15	mg/kg	SW846 6010C
Zinc [a]		36.7	3.1	0.77	mg/kg	SW846 6010C
FA33720-2	**FTBL-SED-34-0-6-050516-QA**					
Arsenic [a]		5.2	2.1	1.1	mg/kg	SW846 6010C
Beryllium [a]		1.0 J	2.1	0.43	mg/kg	SW846 6010C
Copper [a]		9.5	5.3	0.43	mg/kg	SW846 6010C
Lead		15.5	0.85	0.17	mg/kg	SW846 6010C
Nickel [a]		8.7	8.5	0.21	mg/kg	SW846 6010C
Zinc [a]		52.9	4.3	1.1	mg/kg	SW846 6010C

(a) Elevated reporting limit(s) due to matrix interference.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: FTBL-SED-49-0-6-050416-QA
Lab Sample ID: FA33720-1
Matrix: SO - Soil
Project: Castner Range; Ft Bliss, TX

Date Sampled: 05/04/16
Date Received: 05/06/16
Percent Solids: 99.2

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Antimony [a]	0.77 U	3.1	0.77	0.20	mg/kg	4	05/12/16	05/13/16	LM	SW846 6010C [2]	SW846 3050B [3]
Arsenic [a]	6.0	1.5	0.77	0.31	mg/kg	4	05/12/16	05/13/16	LM	SW846 6010C [2]	SW846 3050B [3]
Beryllium [a]	0.77	0.77	0.15	0.077	mg/kg	4	05/12/16	05/13/16	LM	SW846 6010C [2]	SW846 3050B [3]
Copper	13.5	0.96	0.077	0.038	mg/kg	1	05/12/16	05/12/16	LM	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	50.7	3.1	0.62	0.15	mg/kg	4	05/12/16	05/13/16	LM	SW846 6010C [2]	SW846 3050B [3]
Nickel [a]	8.6	6.2	0.15	0.077	mg/kg	4	05/12/16	05/13/16	LM	SW846 6010C [2]	SW846 3050B [3]
Zinc [a]	36.7	3.1	0.77	0.46	mg/kg	4	05/12/16	05/13/16	LM	SW846 6010C [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA13157
(2) Instrument QC Batch: MA13159
(3) Prep QC Batch: MP30349

(a) Elevated reporting limit(s) due to matrix interference.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection J = Indicates a result > = DL (MDL) but < LOQ

Report of Analysis

Client Sample ID: FTBL-SED-34-0-6-050516-QA
Lab Sample ID: FA33720-2
Matrix: SO - Soil
Project: Castner Range; Ft Bliss, TX

Date Sampled: 05/05/16
Date Received: 05/06/16
Percent Solids: 100.0

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Antimony [a]	1.1 U	4.3	1.1	0.28	mg/kg	5	05/12/16	05/13/16	LM	SW846 6010C [2]	SW846 3050B [4]
Arsenic [a]	5.2	2.1	1.1	0.43	mg/kg	5	05/12/16	05/13/16	LM	SW846 6010C [2]	SW846 3050B [4]
Beryllium [a]	1.0 J	2.1	0.43	0.21	mg/kg	10	05/12/16	05/16/16	LM	SW846 6010C [3]	SW846 3050B [4]
Copper [a]	9.5	5.3	0.43	0.21	mg/kg	5	05/12/16	05/13/16	LM	SW846 6010C [2]	SW846 3050B [4]
Lead	15.5	0.85	0.17	0.043	mg/kg	1	05/12/16	05/12/16	LM	SW846 6010C [1]	SW846 3050B [4]
Nickel [a]	8.7	8.5	0.21	0.11	mg/kg	5	05/12/16	05/13/16	LM	SW846 6010C [2]	SW846 3050B [4]
Zinc [a]	52.9	4.3	1.1	0.64	mg/kg	5	05/12/16	05/13/16	LM	SW846 6010C [2]	SW846 3050B [4]

(1) Instrument QC Batch: MA13157
(2) Instrument QC Batch: MA13159
(3) Instrument QC Batch: MA13162
(4) Prep QC Batch: MP30349

(a) Elevated reporting limit(s) due to matrix interference.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- QC Evaluation: DOD QSM5 Limits

Accutest Laboratories Southeast
Chain of Custody

ACCUTEST LABORATORIES

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 • FAX: 407-425-0707
www.accutest.com

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Accutest Quote # | SKIFF#

Client / Reporting Information

Company Name: Arcadis
Address: 630 Plaza Dr. Suite 6000
City: Highlands Ranch State: CO Zip:
[redacted]

Project Information

Project Name: Cosmer Range, Ft. Bliss Tx
Street: 401 E. Main St, Suite 400
City: El Paso State: TX
Project #: 06201038.0000
Fax #:
Client Purchase Order #:

Analytical Information

Sb, As, Be, Cu, Pb, Ni

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe

Accutest Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	CONTAINER INFORMATION: OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NaOH+ZnAc	DI WATER	MeOH	LAB USE ONLY
1	FTBL-SED-49-0-6-050416-QA	5-4-16	10:40	AG	S	1		X								
2	FTBL-SED-34-0-6-050516-QA	5-5-16	11:00	AG	S	1		X								
[redacted]																

TURNAROUND TIME (Business Days)

Approved By: / Rush Code

- [X] 10 Days Standard
- [ ] 7 Day RUSH
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [ ] OTHER

Emergency or Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULT1 (EPA LEVEL 4)
- [ ] EDD'S

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by:	Date Time:	Received By:	Relinquished by:	Date Time:
1 [redacted]	5/5/16 1530	2 Fx	3 Fx	[redacted] 5/6/16 930
Relinquished by: 5	Date Time:	Received By: 6	Relinquished by: 7	Date Time:

Lab Use Only: Custody Seal in Place: Y N Temp Blank Provided: Y N Preserved where Applicable: Y N Total # of Coolers: 1 Cooler Temperature (s) Celsius: 4.5

5.1 5

FA33720: Chain of Custody
Page 1 of 3

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA33720 CLIENT: Arcadis PROJECT: Castner Range

DATE/TIME RECEIVED: 5/6/16 930 {MM/DD/YY 24:00} NUMBER OF COOLERS RECEIVED: 1

METHOD OF DELIVERY: (FEDEX) UPS ACCUTEST COURIER DELIVERY OTHER:

AIRBILL NUMBERS: 7830 0147 4370

COOLER INFORMATION

- [ ] CUSTODY SEAL NOT PRESENT OR NOT INTACT
- [ ] CHAIN OF CUSTODY NOT RECEIVED (COC)
- [ ] ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- [ ] SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- [ ] TEMPERATURE CRITERIA NOT MET

TEMPERATURE INFORMATION

- [ ] IR THERM ID 1 CORR. FACTOR +0.0
- [ ] OBSERVED TEMPS: 4.5
- [ ] CORRECTED TEMPS: 4.5 (USED FOR LIMS)

TRIP BLANK INFORMATION

- [ ] TRIP BLANK PROVIDED
- [X] TRIP BLANK NOT PROVIDED
- [X] TRIP BLANK NOT ON COC
- [ ] TRIP BLANK INTACT
- [ ] TRIP BLANK NOT INTACT
- [ ] RECEIVED WATER TRIP BLANK
- [ ] RECEIVED SOIL TRIP BLANK

SAMPLE INFORMATION

- [ ] INCORRECT NUMBER OF CONTAINERS USED
- [ ] SAMPLE RECEIVED IMPROPERLY PRESERVED
- [ ] INSUFFICIENT VOLUME FOR ANALYSIS
- [ ] DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- [ ] ID'S ON COC DO NOT MATCH LABEL
- [ ] VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- [ ] BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- [ ] NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- [ ] UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- [ ] SAMPLE CONTAINER(S) RECEIVED BROKEN
- [ ] 5035 FIELD KITS NOT RECEIVED WITHIN 48 HOURS
- [ ] BULK VOA SOIL JARS NOT RECEIVED WITHIN 48 HOURS
- [ ] % SOLIDS JAR NOT RECEIVED
- [ ] RESIDUAL CHLORINE PRESENT LOT#

{APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS}

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM_____ 5-GRAM_____

NUMBER OF 5035 FIELD KITS ? _____

NUMBER OF LAB FILTERED METALS ? _____

TEST STRIP LOT#s pH 0-3 230315 pH 10-12 219813A OTHER (specify)

SUMMARY OF COMMENTS:

TECHNICIAN SIGNATURE/ [redacted] 5/6/16 REVIEWER SIGNATURE/D [redacted] 5-6-16

NF 11/15 RECEIPTLOG040416.xls

5.1 5



(915) 474-4867
401 E MAIN DR STE 400
EL PASO, TX 79901
UNITED STATES US

SHIP DATE: 05MAY16
ACTWGT: 9.00 LB
CAD: 6990891/SSF01703
DIMS: 15x14x14 IN
BILL THIRD PARTY

TO SAMPLE RECEIVING
ACCUTEST LABS
4405 VINELAND RD
STE C15
ORLANDO FL 32811
(407) 426-6700
INV:
PO:
REF:
DEPT:

FedEx Express

TRK# 0201 7830 0147 4370

FRI - 06 MAY 10:30A
PRIORITY OVERNIGHT

XH TIXA

32811
FL-US MCO

FA33720: Chain of Custody
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QC Evaluation: DOD QSM5 Limits

Job Number: FA33720
Account: Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX
Collected: 05/04/16 thru 05/05/16

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MP30349	SW846 6010C						
MP30349-B1	7440-36-0	Antimony	BSP	REC	96.8	%	79-114
MP30349-B1	7440-38-2	Arsenic	BSP	REC	96.6	%	82-111
MP30349-B1	7440-41-7	Beryllium	BSP	REC	104	%	83-113
MP30349-B1	7440-50-8	Copper	BSP	REC	104	%	81-117
MP30349-B1	7439-92-1	Lead	BSP	REC	98.4	%	81-112
MP30349-B1	7440-02-0	Nickel	BSP	REC	102	%	83-113
MP30349-B1	7440-66-6	Zinc	BSP	REC	101.2	%	82-113
MP30349-S1*	7440-36-0	Antimony	MS	REC	37.8 [a]	%	79-114
MP30349-S1*	7440-38-2	Arsenic	MS	REC	82.2	%	82-111
MP30349-S1*	7440-41-7	Beryllium	MS	REC	92.8	%	83-113
MP30349-S1*	7440-50-8	Copper	MS	REC	33.1 [b]	%	81-117
MP30349-S1*	7439-92-1	Lead	MS	REC	97	%	81-112
MP30349-S1*	7440-02-0	Nickel	MS	REC	86	%	83-113
MP30349-S1*	7440-66-6	Zinc	MS	REC	75.3 [a]	%	82-113
MP30349-S2*	7440-36-0	Antimony	MSD	REC	35.9 [a]	%	79-114
MP30349-S2*	7440-36-0	Antimony	MSD	RPD	16.7	%	20
MP30349-S2*	7440-38-2	Arsenic	MSD	REC	81.2	%	82-111
MP30349-S2*	7440-38-2	Arsenic	MSD	RPD	13	%	20
MP30349-S2*	7440-41-7	Beryllium	MSD	REC	92.2	%	83-113
MP30349-S2*	7440-41-7	Beryllium	MSD	RPD	12.2	%	20
MP30349-S2*	7440-50-8	Copper	MSD	REC	198.8 [b]	%	81-117
MP30349-S2*	7440-50-8	Copper	MSD	RPD	25 [c]	%	20
MP30349-S2*	7439-92-1	Lead	MSD	REC	96.9	%	81-112
MP30349-S2*	7439-92-1	Lead	MSD	RPD	10	%	20
MP30349-S2*	7440-02-0	Nickel	MSD	REC	84.9	%	83-113
MP30349-S2*	7440-02-0	Nickel	MSD	RPD	12.6	%	20
MP30349-S2*	7440-66-6	Zinc	MSD	REC	77.4 [a]	%	82-113
MP30349-S2*	7440-66-6	Zinc	MSD	RPD	3.3	%	20
MP30349-D1*	7440-36-0	Antimony	DUP	RPD	54 [d]	%	20
MP30349-D1*	7440-38-2	Arsenic	DUP	RPD	0	%	20
MP30349-D1*	7440-41-7	Beryllium	DUP	RPD	8.3	%	20
MP30349-D1*	7440-50-8	Copper	DUP	RPD	.6	%	20
MP30349-D1*	7439-92-1	Lead	DUP	RPD	7.7	%	20
MP30349-D1*	7440-02-0	Nickel	DUP	RPD	8.7	%	20
MP30349-D1*	7440-66-6	Zinc	DUP	RPD	16.1	%	20

(a) Spike recovery indicates possible matrix interference and/or sample non-homogeneity.
(b) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
(c) High RPD due to possible sample non-homogeneity.
(d) RPD acceptable due to low duplicate and sample concentrations.

* Sample used for QC is not from job FA33720

Metals Analysis

6

QC Data Summaries

Includes the following where applicable:

- Instrument Runlogs
- Initial and Continuing Calibration Blanks
- Initial and Continuing Calibration Checks
- High and Low Check Standards
- Interfering Element Check Standards
- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries
- IDL and Linear Range Summaries

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051216M1.ICP Date Analyzed: 05/12/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13157
Parameters: Sb,As,Be,Cu,Pb,Ni,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
08:23	MA13157-STD1	1		STDA
08:31	MA13157-STD2	1		STDB
08:35	MA13157-STD3	1		STDC
08:38	MA13157-STD4	1		STDD
08:43	MA13157-HSTD1	1		
08:53	MA13157-ICV1	1		
09:04	MA13157-ICB1	1		
09:08	MA13157-CRIA1	1		
09:14	MA13157-ICSA1	1		
09:21	MA13157-ICSAB1	1		
09:28	MA13157-CCV1	1		
09:36	MA13157-CCB1	1		
09:39	FA33676-3	20		(sample used for QC only; not part of login FA33720)
09:44	MP30343-D1	20		
09:48	MP30343-S1	20		
09:52	MP30343-S2	20		
09:56	MP30343-PS1	20		
10:00	MP30343-SD1	100		
10:04	ZZZZZZ	2		
10:12	ZZZZZZ	2		
10:16	ZZZZZZ	10		
10:21	MA13157-CCV2	1		
10:24	MA13157-CCB2	1		
10:30	ZZZZZZ	10		
10:34	ZZZZZZ	10		
10:39	ZZZZZZ	10		
10:43	ZZZZZZ	10		
10:47	FA33784-1	4		(sample used for QC only; not part of login FA33720)
10:51	MP30344-D1	4		
10:56	MP30344-S1	4		
11:00	MP30344-S2	4		
11:04	MP30344-PS1	4		
11:08	MP30344-SD1	20		

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051216M1.ICP Date Analyzed: 05/12/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13157
Parameters: Sb,As,Be,Cu,Pb,Ni,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
11:12	MA13157-CCV3	1		
11:16	MA13157-CCB3	1		
11:20	ZZZZZZ	2		
11:24	ZZZZZZ	2		
11:33	ZZZZZZ	2		
11:37	ZZZZZZ	2		
11:45	ZZZZZZ	4		
11:49	ZZZZZZ	5		
11:53	ZZZZZZ	2		
12:02	MA13157-CCV4	1		
12:06	MA13157-CCB4	1		
12:10	ZZZZZZ	20		
12:15	ZZZZZZ	10		
12:19	ZZZZZZ	10		
12:23	ZZZZZZ	10		
12:27	MP30348-MB1	1		
12:31	MP30348-B1	1		
12:35	FA33665-3F	1		(sample used for QC only; not part of login FA33720)
12:40	MP30348-D1	1		
12:44	MP30348-SD1	5		
12:48	MP30348-PS1	1		
12:52	MA13157-CCV5	1		
12:56	MA13157-CCB5	1		
13:00	MP30348-S1	1		
13:04	MP30348-S2	1		
13:08	ZZZZZZ	1		
13:12	ZZZZZZ	1		
13:16	ZZZZZZ	1		
13:21	ZZZZZZ	1		
13:25	ZZZZZZ	1		
13:29	ZZZZZZ	1		
13:33	ZZZZZZ	1		
13:37	ZZZZZZ	1		

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051216M1.ICP Date Analyzed: 05/12/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13157
Parameters: Sb,As,Be,Cu,Pb,Ni,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:41	MA13157-CCV6	1		
13:51	MA13157-CCB6	1		
14:17	MA13157-ICV2	1		
14:23	MA13157-CCV7	1		
14:29	MA13157-CCB7	1		
14:32	ZZZZZZ	1		
14:37	ZZZZZZ	1		
14:41	ZZZZZZ	1		
14:45	ZZZZZZ	1		
14:49	ZZZZZZ	1		
14:53	ZZZZZZ	1		
14:57	ZZZZZZ	1		
15:02	ZZZZZZ	1		
15:06	ZZZZZZ	1		
15:10	ZZZZZZ	1		
15:14	MA13157-CCV8	1		
15:18	MA13157-CCB8	1		
15:22	ZZZZZZ	1		
15:26	MP30350-MB1	1		
15:30	MP30350-B1	1		
15:34	FA33701-1	1		(sample used for QC only; not part of login FA33720)
15:39	MP30350-D1	1		
15:43	MP30350-SD1	5		
15:47	MP30350-S1	1		
15:51	MP30350-S2	1		
15:55	ZZZZZZ	1		
16:00	FA33666-1L	1		(sample used for QC only; not part of login FA33720)
16:04	MA13157-CCV9	1		
16:08	MA13157-CCB9	1		
16:12	ZZZZZZ	1		
16:16	ZZZZZZ	1		
16:20	ZZZZZZ	1		
16:25	ZZZZZZ	1		

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051216M1.ICP Date Analyzed: 05/12/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13157
Parameters: Sb,As,Be,Cu,Pb,Ni,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
16:29	ZZZZZZ	1		
16:33	ZZZZZZ	1		
16:37	ZZZZZZ	1		
16:42	ZZZZZZ	1		
16:46	MP30350-D2	1		
16:50	MP30350-MB2	1		
16:55	MA13157-CCV10	1		
16:59	MA13157-CCB10	1		
17:03	MP30350-B2	1		
17:07	MP30349-MB1	1		
17:11	MP30349-B1	1		
17:15	FA33828-1	1		(sample used for QC only; not part of login FA33720)
17:19	MP30349-D1	1		
17:23	MP30349-SD1	5		
17:27	MP30349-PS1	1		
17:31	MP30349-S1	1		
17:35	MP30349-S2	1		
17:43	MA13157-CCV11	1		
17:47	MA13157-CCB11	1		
17:51	ZZZZZZ	10		
18:00	FA33720-1	1		
18:04	FA33720-2	1		
---------->	Last reportable sample/prep for job FA33720			
18:09	ZZZZZZ	5		
18:13	ZZZZZZ	5		
18:17	ZZZZZZ	5		
18:21	ZZZZZZ	5		
18:26	ZZZZZZ	5		
18:30	ZZZZZZ	5		
18:34	MA13157-CCV12	1		
18:38	MA13157-CCB12	1		
18:42	ZZZZZZ	1		
18:46	ZZZZZZ	1		
18:50	ZZZZZZ	1		

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051216M1.ICP Date Analyzed: 05/12/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13157
Parameters: Sb,As,Be,Cu,Pb,Ni,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
18:55	ZZZZZZ	1		
19:03	ZZZZZZ	1		
19:07	ZZZZZZ	20		
19:12	MA13157-CRIA2	1		
19:16	MA13157-ICSA2	1		
19:20	MA13157-ICSAB2	1		
19:24	MA13157-CCV13	1		
19:28	MA13157-CCB13	1		
---------->	Last reportable CCB for job FA33720			
19:32	MA13157-CCV14	1		
19:36	MA13157-CCB14	1		

Refer to raw data for calibration curve and standards.

INTERNAL STANDARD SUMMARY

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051216M1.ICP Date Analyzed: 05/12/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13157
Parameters: Sb,As,Be,Cu,Pb,Ni,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
08:23	MA13157-STD1	6929	58823	5866	3113
08:31	MA13157-STD2	6938	57117	5863	2893
08:35	MA13157-STD3	6578	54159	5739	2606
08:38	MA13157-STD4	6305	53134	5767	2405
08:43	MA13157-HSTD1	6287	53214	5762	2409
08:53	MA13157-ICV1	6436	54823	5783	2589
09:04	MA13157-ICB1	6882 R	58466 R	5870 R	3101 R
09:08	MA13157-CRIA1	6721	56385	5808	2907
09:14	MA13157-ICSA1	6126	48507	5600	2329
09:21	MA13157-ICSAB1	6198	49534	5606	2327
09:28	MA13157-CCV1	6646	54654	5768	2612
09:36	MA13157-CCB1	7001	57714	5794	3091
09:39	FA33676-3	6837	55322	5726	2853
09:44	MP30343-D1	6785	55345	5653	2826
09:48	MP30343-S1	6891	55946	5760	2855
09:52	MP30343-S2	6770	55617	5733	2816
09:56	MP30343-PS1	6769	55044	5737	2825
10:00	MP30343-SD1	6857	56992	5738	2986
10:04	ZZZZZZ	6772	55883	5747	2854
10:12	ZZZZZZ	6774	55490	5859	2812
10:16	ZZZZZZ	5404	42410	5416	1943
10:21	MA13157-CCV2	6552	54093	5717	2582
10:24	MA13157-CCB2	6964	57991	5881	3084
10:30	ZZZZZZ	5629	44660	5545	2015
10:34	ZZZZZZ	5520	44232	5518	2008
10:39	ZZZZZZ	5360	42672	5579	1925
10:43	ZZZZZZ	5491	43640	5499	2004
10:47	FA33784-1	6902	56705	6044	2590
10:51	MP30344-D1	7028	58115	6158	2647
10:56	MP30344-S1	6886	57338	6126	2572
11:00	MP30344-S2	7003	58683	6190	2635
11:04	MP30344-PS1	6844	57670	6286	2602
11:08	MP30344-SD1	6820	57496	5810	2875

INTERNAL STANDARD SUMMARY

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051216M1.ICP Date Analyzed: 05/12/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13157
Parameters: Sb,As,Be,Cu,Pb,Ni,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
11:12	MA13157-CCV3	6507	54265	5726	2573
11:16	MA13157-CCB3	6889	57525	5708	3073
11:20	ZZZZZZ	7798	63950	6634	2766
11:24	ZZZZZZ	7852	63146	6643	2770
11:33	ZZZZZZ	7851	64235	6607	2842
11:37	ZZZZZZ	7607	61319	6538	2565
11:45	ZZZZZZ	7020	56868	5935	2596
11:49	ZZZZZZ	7473	60953	6187	2910
11:53	ZZZZZZ	7263	58398	6296	2528
12:02	MA13157-CCV4	6631	54143	5579	2594
12:06	MA13157-CCB4	6984	57358	5692	3062
12:10	ZZZZZZ	6838	55076	5648	2852
12:15	ZZZZZZ	6762	54209	5712	2626
12:19	ZZZZZZ	6776	53939	5655	2635
12:23	ZZZZZZ	6618	52843	5564	2616
12:27	MP30348-MB1	7112	57722	5707	3078
12:31	MP30348-B1	6867	54591	5636	2742
12:35	FA33665-3F	6631	52960	5565	2657
12:40	MP30348-D1	6637	52804	5543	2655
12:44	MP30348-SD1	6926	55345	5582	2889
12:48	MP30348-PS1	6669	52425	5528	2625
12:52	MA13157-CCV5	6728	53094	5537	2583
12:56	MA13157-CCB5	7165	56762	5661	3092
13:00	MP30348-S1	6729	52557	5461	2545
13:04	MP30348-S2	6700	51963	5518	2539
13:08	ZZZZZZ	6790	53577	5476	2732
13:12	ZZZZZZ	6829	53976	5546	2745
13:16	ZZZZZZ	6664	52063	5489	2658
13:21	ZZZZZZ	6666	52498	5432	2675
13:25	ZZZZZZ	6735	53172	5503	2704
13:29	ZZZZZZ	6609	52379	5490	2632
13:33	ZZZZZZ	6900	54694	5548	2850
13:37	ZZZZZZ	6927	54414	5575	2801

INTERNAL STANDARD SUMMARY

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051216M1.ICP Date Analyzed: 05/12/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13157
Parameters: Sb,As,Be,Cu,Pb,Ni,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
13:41	MA13157-CCV6	6773	53337	5486	2595
13:51	MA13157-CCB6	7153	57282	5670	3094
14:17	MA13157-ICV2	6828	53850	5503	2622
14:23	MA13157-CCV7	6886	53127	5460	2626
14:29	MA13157-CCB7	7156	56591	5565	3079
14:32	ZZZZZZ	6750	52819	5552	2721
14:37	ZZZZZZ	6910	54129	5439	2838
14:41	ZZZZZZ	6916	53780	5465	2813
14:45	ZZZZZZ	6746	52610	5475	2718
14:49	ZZZZZZ	6874	53750	5503	2780
14:53	ZZZZZZ	6755	52575	5483	2667
14:57	ZZZZZZ	6874	53693	5581	2772
15:02	ZZZZZZ	6861	53696	5525	2775
15:06	ZZZZZZ	6802	52837	5535	2693
15:10	ZZZZZZ	6884	53396	5490	2769
15:14	MA13157-CCV8	6767	52905	5479	2573
15:18	MA13157-CCB8	7184	56528	5551	3077
15:22	ZZZZZZ	5881	44012	5292	2148
15:26	MP30350-MB1	7232	56988	5596	3069
15:30	MP30350-B1	6948	53932	5473	2737
15:34	FA33701-1	6683	51685	5428	2618
15:39	MP30350-D1	6725	51741	5416	2622
15:43	MP30350-SD1	6999	53876	5436	2839
15:47	MP30350-S1	6723	51387	5497	2527
15:51	MP30350-S2	6715	50469	5396	2522
15:55	ZZZZZZ	6839	52037	5453	2688
16:00	FA33666-1L	6834	51711	5406	2672
16:04	MA13157-CCV9	6817	52148	5416	2575
16:08	MA13157-CCB9	7166	55836	5515	3051
16:12	ZZZZZZ	6762	51891	5497	2666
16:16	ZZZZZZ	6796	51784	5379	2675
16:20	ZZZZZZ	6791	51565	5342	2666
16:25	ZZZZZZ	6815	51758	5398	2677

INTERNAL STANDARD SUMMARY

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051216M1.ICP Date Analyzed: 05/12/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13157
Parameters: Sb,As,Be,Cu,Pb,Ni,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
16:29	ZZZZZZ	6763	51590	5437	2668
16:33	ZZZZZZ	6794	51700	5436	2664
16:37	ZZZZZZ	6765	51132	5362	2653
16:42	ZZZZZZ	6835	52036	5422	2682
16:46	MP30350-D2	6798	52091	5444	2678
16:50	MP30350-MB2	6790	51771	5407	2679
16:55	MA13157-CCV10	6786	52123	5375	2566
16:59	MA13157-CCB10	7105	55689	5479	3024
17:03	MP30350-B2	6704	51638	5480	2557
17:07	MP30349-MB1	7153	56557	5479	3068
17:11	MP30349-B1	6938	53465	5380	2722
17:15	FA33828-1	8279	63395	6518	2762
17:19	MP30349-D1	8207	63378	6476	2762
17:23	MP30349-SD1	7393	57947	5871	2950
17:27	MP30349-PS1	8155	63288	6462	2705
17:31	MP30349-S1	8007	61936	6321	2639
17:35	MP30349-S2	8076	61910	6395	2633
17:43	MA13157-CCV11	6757	52584	5424	2567
17:47	MA13157-CCB11	7174	56043	5462	3057
17:51	ZZZZZZ	6611	50959	5404	2989
18:00	FA33720-1	9759 !	71743	8201 !	2176
18:04	FA33720-2	13643 !	104860 !	11235 !	2500
18:09	ZZZZZZ	7868	59897	6191	2697
18:13	ZZZZZZ	8406	64267	6512	2760
18:17	ZZZZZZ	8449	64043	6416	2803
18:21	ZZZZZZ	7904	60029	6091	2722
18:26	ZZZZZZ	8107	61606	6235	2775
18:30	ZZZZZZ	8619 !	64970	6525	2802
18:34	MA13157-CCV12	6792	52104	5230	2567
18:38	MA13157-CCB12	7135	55750	5345	3038
18:42	ZZZZZZ	6886	52485	5670	2149
18:46	ZZZZZZ	7655	58427	5703	2768
18:50	ZZZZZZ	7450	56855	5485	2949

INTERNAL STANDARD SUMMARY

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051216M1.ICP Date Analyzed: 05/12/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13157
Parameters: Sb,As,Be,Cu,Pb,Ni,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
18:55	ZZZZZZ	7182	57726	5665	3002
19:03	ZZZZZZ	6422	57125	5562	2998
19:07	ZZZZZZ	7301	56000	5389	3055
19:12	MA13157-CRIA2	7075	53879	5282	2879
19:16	MA13157-ICSA2	6340	46766	5120	2315
19:20	MA13157-ICSAB2	6306	46697	5135	2286
19:24	MA13157-CCV13	6884	52812	5229	2598
19:28	MA13157-CCB13	7183	55187	5251	3033
19:32	MA13157-CCV14	6778	52318	5274	2566
19:36	MA13157-CCB14	7132	55586	5321	3037

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium (2243)	60-125 %
Istd#2	Yttrium (3600)	60-125 %
Istd#3	Yttrium (3710)	60-125 %
Istd#4	Indium	60-125 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051216M1.ICP Date Analyzed: 05/12/16 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA13157 Units: ug/l

Time: / Sample ID:			09:04 ICB1		09:36 CCB1		10:24 CCB2		11:16 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14								
Antimony	6.0	1	-0.60	<6.0	0.80	<6.0	2.4	<6.0	1.0	<6.0
Arsenic	10	1.3	0.60	<10	0.40	<10	2.0	<10	1.4	<10
Barium	200	1	anr							
Beryllium	4.0	.2	-0.40	<4.0	0.10	<4.0	0.10	<4.0	0.0	<4.0
Cadmium	5.0	.2	anr							
Calcium	1000	50								
Chromium	10	1	anr							
Cobalt	50	.2								
Copper	25	1	-0.80	<25	-1.1	<25	-0.70	<25	-0.70	<25
Iron	300	17	anr							
Lead	5.0	1	-0.90	<5.0	-0.20	<5.0	-0.70	<5.0	0.50	<5.0
Magnesium	5000	35								
Manganese	15	.5								
Molybdenum	50	.3								
Nickel	40	.4	0.0	<40	0.10	<40	0.0	<40	0.10	<40
Potassium	10000	200								
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500	anr							
Strontium	10	.5								
Thallium	10	1.1	anr							
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5								
Zinc	20	3	-1.0	<20	-0.90	<20	-1.0	<20	-1.0	<20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051216M1.ICP Date Analyzed: 05/12/16 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA13157 Units: ug/l

Time: / Sample ID:			12:06 CCB4		12:56 CCB5		13:51 CCB6		14:29 CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14								
Antimony	6.0	1	1.2	<6.0	1.3	<6.0	-0.10	<6.0	0.90	<6.0
Arsenic	10	1.3	1.1	<10	1.3	<10	0.40	<10	0.80	<10
Barium	200	1	anr							
Beryllium	4.0	.2	-0.20	<4.0	-0.10	<4.0	-0.50	<4.0	0.20	<4.0
Cadmium	5.0	.2	anr							
Calcium	1000	50								
Chromium	10	1	anr							
Cobalt	50	.2								
Copper	25	1	-0.70	<25	-1.0	<25	-1.5	<25	-0.30	<25
Iron	300	17	anr							
Lead	5.0	1	0.30	<5.0	-0.40	<5.0	0.50	<5.0	0.10	<5.0
Magnesium	5000	35								
Manganese	15	.5								
Molybdenum	50	.3								
Nickel	40	.4	0.0	<40	0.0	<40	-0.10	<40	0.10	<40
Potassium	10000	200								
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500	anr							
Strontium	10	.5								
Thallium	10	1.1	anr							
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5								
Zinc	20	3	-1.1	<20	-1.1	<20	-1.3	<20	-0.10	<20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051216M1.ICP Date Analyzed: 05/12/16 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA13157 Units: ug/l

Time:			15:18		16:08		16:59		17:47	
Sample ID:			CCB8		CCB9		CCB10		CCB11	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14								
Antimony	6.0	1	1.7	<6.0	1.6	<6.0	2.0	<6.0	1.6	<6.0
Arsenic	10	1.3	1.7	<10	1.7	<10	1.5	<10	0.90	<10
Barium	200	1	anr							
Beryllium	4.0	.2	0.10	<4.0	0.30	<4.0	0.30	<4.0	0.30	<4.0
Cadmium	5.0	.2	anr							
Calcium	1000	50								
Chromium	10	1	anr							
Cobalt	50	.2								
Copper	25	1	0.0	<25	0.10	<25	-0.20	<25	-0.30	<25
Iron	300	17	anr							
Lead	5.0	1	-0.70	<5.0	-0.30	<5.0	-0.80	<5.0	0.40	<5.0
Magnesium	5000	35								
Manganese	15	.5								
Molybdenum	50	.3								
Nickel	40	.4	0.30	<40	0.20	<40	0.20	<40	0.10	<40
Potassium	10000	200								
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500	anr							
Strontium	10	.5								
Thallium	10	1.1	anr							
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5								
Zinc	20	3	0.10	<20	0.10	<20	0.10	<20	0.10	<20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051216M1.ICP Date Analyzed: 05/12/16 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA13157 Units: ug/l

Time:			18:38		19:28	
Sample ID:			CCB12		CCB13	
Metal	RL	IDL	raw	final	raw	final
Aluminum	200	14				
Antimony	6.0	1	2.1	<6.0	2.4	<6.0
Arsenic	10	1.3	0.90	<10	0.60	<10
Barium	200	1	anr			
Beryllium	4.0	.2	0.10	<4.0	0.10	<4.0
Cadmium	5.0	.2	anr			
Calcium	1000	50				
Chromium	10	1	anr			
Cobalt	50	.2				
Copper	25	1	-0.10	<25	-0.50	<25
Iron	300	17	anr			
Lead	5.0	1	-0.60	<5.0	0.0	<5.0
Magnesium	5000	35				
Manganese	15	.5				
Molybdenum	50	.3				
Nickel	40	.4	-0.10	<40	0.10	<40
Potassium	10000	200				
Selenium	10	2.4	anr			
Silver	10	.7	anr			
Sodium	10000	500	anr			
Strontium	10	.5				
Thallium	10	1.1	anr			
Tin	50	.9				
Titanium	10	.5				
Vanadium	50	.5				
Zinc	20	3	0.10	<20	0.0	<20

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051216M1.ICP Date Analyzed: 05/12/16 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA13157 Units: ug/l

Time:		08:53			09:28			10:21	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony	2000	2070	103.5	2000	1960	98.0	2000	2000	100.0
Arsenic	2000	2060	103.0	2000	1960	98.0	2000	1990	99.5
Barium	anr								
Beryllium	2000	2050	102.5	2000	1990	99.5	2000	2030	101.5
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper	2000	2010	100.5	2000	2000	100.0	2000	2020	101.0
Iron	anr								
Lead	2000	2020	101.0	2000	1970	98.5	2000	1990	99.5
Magnesium									
Manganese									
Molybdenum									
Nickel	2000	2110	105.5	2000	1990	99.5	2000	2010	100.5
Potassium									
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium									
Zinc	2000	2090	104.5	2000	2000	100.0	2000	2030	101.5

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051216M1.ICP Date Analyzed: 05/12/16 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA13157 Units: ug/l

Time:		11:12			12:02			12:52	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony	2000	2010	100.5	2000	1990	99.5	2000	1970	98.5
Arsenic	2000	2010	100.5	2000	1980	99.0	2000	1960	98.0
Barium	anr								
Beryllium	2000	2000	100.0	2000	2010	100.5	2000	2050	102.5
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper	2000	2020	101.0	2000	2030	101.5	2000	2070	103.5
Iron	anr								
Lead	2000	2000	100.0	2000	2010	100.5	2000	2060	103.0
Magnesium									
Manganese									
Molybdenum									
Nickel	2000	2030	101.5	2000	2000	100.0	2000	1990	99.5
Potassium									
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium									
Zinc	2000	2040	102.0	2000	2030	101.5	2000	2040	102.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051216M1.ICP Date Analyzed: 05/12/16 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA13157 Units: ug/l

Time:		13:41			14:17			14:23	
Sample ID:	CCV	CCV6		ICV	ICV2		CCV	CCV7	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony	2000	1960	98.0	2000	1980	99.0	2000	1930	96.5
Arsenic	2000	1940	97.0	2000	1950	97.5	2000	1930	96.5
Barium	anr								
Beryllium	2000	2070	103.5	2000	2080	104.0	2000	2010	100.5
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper	2000	2090	104.5	2000	1980	99.0	2000	1980	99.0
Iron	anr								
Lead	2000	2060	103.0	2000	1990	99.5	2000	1950	97.5
Magnesium									
Manganese									
Molybdenum									
Nickel	2000	1980	99.0	2000	2020	101.0	2000	1960	98.0
Potassium									
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium									
Zinc	2000	2040	102.0	2000	2030	101.5	2000	1980	99.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051216M1.ICP Date Analyzed: 05/12/16 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA13157 Units: ug/l

Time:		15:14			16:04			16:55	
Sample ID:	CCV	CCV8		CCV	CCV9		CCV	CCV10	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony	2000	1990	99.5	2000	1970	98.5	2000	1980	99.0
Arsenic	2000	1980	99.0	2000	1960	98.0	2000	1960	98.0
Barium	anr								
Beryllium	2000	1990	99.5	2000	2020	101.0	2000	2040	102.0
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper	2000	2000	100.0	2000	2020	101.0	2000	2040	102.0
Iron	anr								
Lead	2000	2000	100.0	2000	2010	100.5	2000	2010	100.5
Magnesium									
Manganese									
Molybdenum									
Nickel	2000	2000	100.0	2000	1990	99.5	2000	2000	100.0
Potassium									
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium									
Zinc	2000	2020	101.0	2000	2020	101.0	2000	2030	101.5

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051216M1.ICP Date Analyzed: 05/12/16 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA13157 Units: ug/l

Time:		17:43			18:34			19:24	
Sample ID:	CCV	CCV11		CCV	CCV12		CCV	CCV13	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony	2000	1990	99.5	2000	1960	98.0	2000	1940	97.0
Arsenic	2000	1990	99.5	2000	1940	97.0	2000	1920	96.0
Barium	anr								
Beryllium	2000	2020	101.0	2000	2070	103.5	2000	2010	100.5
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper	2000	2030	101.5	2000	2050	102.5	2000	2010	100.5
Iron	anr								
Lead	2000	2010	100.5	2000	2010	100.5	2000	1980	99.0
Magnesium									
Manganese									
Molybdenum									
Nickel	2000	2010	100.5	2000	1990	99.5	2000	1950	97.5
Potassium									
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium									
Zinc	2000	2030	101.5	2000	2030	101.5	2000	1990	99.5

(*) Outside of QC limits
(anr) Analyte not requested

HIGH STANDARD CHECK SUMMARY

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051216M1.ICP Date Analyzed: 05/12/16 Methods: SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA13157 Units: ug/l

Time:		08:43	
Sample ID:	HSTD	HSTD1	
Metal	True	Results	% Rec
Aluminum			
Antimony	4000	4030	100.8
Arsenic	4000	4050	101.3
Barium	anr		
Beryllium	4000	3950	98.8
Cadmium	anr		
Calcium			
Chromium	anr		
Cobalt			
Copper	4000	3960	99.0
Iron	anr		
Lead	4000	4020	100.5
Magnesium			
Manganese			
Molybdenum			
Nickel	4000	4000	100.0
Potassium			
Selenium	anr		
Silver	anr		
Sodium	anr		
Strontium			
Thallium	anr		
Tin			
Titanium			
Vanadium			
Zinc	4000	3980	99.5

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051216M1.ICP Date Analyzed: 05/12/16 Methods: SW846 6010C
QC Limits: CRI 70-130% CRIA 70-130% Run ID: MA13157 Units: ug/l

Time:			09:08		19:12	
Sample ID:	CRI	CRIA	CRIA1		CRIA2	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	400	200				
Antimony	10	5.0	4.5	90.0	4.3	86.0
Arsenic	20	10	10.8	108.0	10.3	103.0
Barium	400	200	anr			
Beryllium	10	5.0	4.8	96.0	5.2	104.0
Cadmium	10	5.0	anr			
Calcium	2000	1000				
Chromium	20	10	anr			
Cobalt	100	50				
Copper	50	25	26.4	105.6	27.1	108.4
Iron	600	300	anr			
Lead	10	5.0	4.0	80.0	4.5	90.0
Magnesium	10000	5000				
Manganese	30	15				
Molybdenum	100	50				
Nickel	80	40	44.2	110.5	44.2	110.5
Potassium	20000	10000				
Selenium	20	10	anr			
Silver	20	10	anr			
Sodium	20000	10000	anr			
Strontium	20	10				
Thallium	20	10	anr			
Tin	100	50				
Titanium	20	10				
Vanadium	100	50				
Zinc	40	20	22.5	112.5	22.8	114.0

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051216M1.ICP Date Analyzed: 05/12/16 Methods: SW846 6010C
QC Limits: 80 to 120 % Recovery Run ID: MA13157 Units: ug/l

Time:			09:14		09:21		19:16		19:20	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1		ICSA2		ICSAB2	
Metal	True	True	Results	% Rec	Results	% Rec	Results	% Rec	Results	% Rec
Aluminum	500000	500000	508000	101.6	507000	101.4	512000	102.4	507000	101.4
Antimony		1000	0.60		990	99.0	-0.10		996	99.6
Arsenic		1000	0.20		1060	106.0	-0.80		1070	107.0
Barium		500	0.30		520	104.0	0.50		536	107.2
Beryllium		500	-0.40		506	101.2	-0.10		511	102.2
Cadmium		1000	0.0		964	96.4	-1.1		977	97.7
Calcium	500000	500000	474000	94.8	476000	95.2	470000	94.0	475000	95.0
Chromium		500	0.30		511	102.2	0.40		519	103.8
Cobalt		500	-0.50		478	95.6	-0.40		484	96.8
Copper		500	-1.5		534	106.8	-0.50		547	109.4
Iron	200000	200000	182000	91.0	181000	90.5	180000	90.0	181000	90.5
Lead		1000	-0.60		960	96.0	-6.4		974	97.4
Magnesium	500000	500000	515000	103.0	507000	101.4	504000	100.8	506000	101.2
Manganese		500	-0.60		513	102.6	-1.1		526	105.2
Molybdenum		1000	-0.40		939	93.9	0.30		946	94.6
Nickel		1000	0.0		956	95.6	0.90		962	96.2
Potassium			-4.5		-6.1		146		105	
Selenium		1000	0.0		997	99.7	-2.0		999	99.9
Silver		1000	-0.40		983	98.3	0.0		997	99.7
Sodium			182		177		130		146	
Strontium		1000	-0.20		1030	103.0	0.50		1070	107.0
Thallium		1000	0.20		957	95.7	1.5		968	96.8
Tin		1000	-0.10		914	91.4	0.30		915	91.5
Titanium		1000	-0.30		1010	101.0	0.80		1040	104.0
Vanadium		500	-0.70		471	94.2	0.20		481	96.2
Zinc		1000	-2.4		963	96.3	-1.7		978	97.8

(*) Outside of QC limits
(anr) Analyte not requested

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SA051316M1.ICP Date Analyzed: 05/13/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13159
Parameters: Sb,As,Be,Cu,Pb,Ni,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
09:33	MA13159-STD1	1		STDA
09:37	MA13159-STD2	1		STDB
09:49	MA13159-STD3	1		STDC
09:52	MA13159-STD4	1		STDD
09:57	MA13159-HSTD1	1		
10:03	MA13159-ICV1	1		
10:10	MA13159-ICB1	1		
10:14	MA13159-CRIA1	1		
10:20	MA13159-ICSA1	1		
10:25	MA13159-ICSAB1	1		
10:33	MA13159-CCV1	1		
10:40	MA13159-CCB1	1		
10:44	ZZZZZZ	50		
10:48	FA33720-1	4		
10:52	FA33720-2	5		
---------->	Last reportable sample/prep for job FA33720			
10:57	ZZZZZZ	10		
11:01	ZZZZZZ	10		
11:06	ZZZZZZ	4		
11:10	ZZZZZZ	20		
11:15	MP30353-MB1	1		
11:19	MP30353-B1	1		
11:28	MA13159-CCV2	1		
11:32	MA13159-CCB2	1		
11:37	MP30353-D1	5		
11:45	MP30353-PS1	5		
11:50	MP30353-S1	5		
11:54	MP30353-S2	5		
11:58	ZZZZZZ	1		
12:03	ZZZZZZ	1		
12:07	ZZZZZZ	1		
12:12	ZZZZZZ	1		
12:16	ZZZZZZ	1		
12:20	MA13159-CCV3	1		

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SA051316M1.ICP Date Analyzed: 05/13/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13159
Parameters: Sb,As,Be,Cu,Pb,Ni,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
12:25	MA13159-CCB3	1		
12:29	ZZZZZZ	1		
12:34	ZZZZZZ	1		
12:38	ZZZZZZ	1		
12:43	ZZZZZZ	1		
12:47	ZZZZZZ	1		
12:52	ZZZZZZ	1		
12:56	ZZZZZZ	1		
13:01	ZZZZZZ	1		
13:05	ZZZZZZ	1		
13:10	ZZZZZZ	1		
13:14	MA13159-CCV4	1		
13:19	MA13159-CCB4	1		
13:47	MA13159-CCV5	1		
13:53	MA13159-CCB5	1		
14:02	MA13159-ICV2	1		
14:13	ZZZZZZ	1		
14:22	ZZZZZZ	1		
14:32	MA13159-CRIA2	1		
14:36	MP30353-SD1	25		
14:40	MP30354-MB1	1		
14:45	MP30354-B1	1		
14:49	FA33866-1	1		(sample used for QC only; not part of login FA33720)
14:54	MP30354-D1	1		
14:58	MA13159-CCV6	1		
15:02	MA13159-CCB6	1		
15:07	MP30354-SD1	5		
15:11	MP30354-PS1	1		
15:16	MP30354-S1	1		
15:20	MP30354-S2	1		
15:24	ZZZZZZ	1		
15:29	ZZZZZZ	1		
15:33	ZZZZZZ	1		

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SA051316M1.ICP Date Analyzed: 05/13/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13159
Parameters: Sb,As,Be,Cu,Pb,Ni,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
15:38	ZZZZZZ	1		
15:42	ZZZZZZ	1		
15:47	ZZZZZZ	1		
15:51	MA13159-CCV7	1		
15:55	MA13159-CCB7	1		
16:00	ZZZZZZ	1		
16:04	ZZZZZZ	1		
16:09	ZZZZZZ	1		
16:13	ZZZZZZ	1		
16:18	ZZZZZZ	1		
16:22	ZZZZZZ	1		
16:27	ZZZZZZ	1		
16:31	ZZZZZZ	1		
16:36	ZZZZZZ	1		
16:40	ZZZZZZ	1		
16:45	MA13159-CCV8	1		
16:49	MA13159-CCB8	1		
16:54	ZZZZZZ	1		
16:58	ZZZZZZ	1		
17:03	ZZZZZZ	1		
17:07	MP30355-MB1	1		
17:12	MP30355-B1	1		
17:16	MP30355-B2	1		
17:20	ZZZZZZ	1		
17:25	ZZZZZZ	1		
17:29	ZZZZZZ	1		
17:34	ZZZZZZ	1		
17:38	MA13159-CCV9	1		
17:42	MA13159-CCB9	1		
17:47	ZZZZZZ	1		
17:51	ZZZZZZ	1		
17:56	MA13159-CRIA3	1		
18:00	MA13159-ICSA2	1		

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SA051316M1.ICP Date Analyzed: 05/13/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13159
Parameters: Sb,As,Be,Cu,Pb,Ni,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
18:05	MA13159-ICSAB2	1		
18:09	MA13159-CCV10	1		
18:14	MA13159-CCB10	1		

----------> Last reportable CCB for job FA33720
Refer to raw data for calibration curve and standards.

INTERNAL STANDARD SUMMARY

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SA051316M1.ICP Date Analyzed: 05/13/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13159
Parameters: Sb,As,Be,Cu,Pb,Ni,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
09:33	MA13159-STD1	5179	41549	3901	2785
09:37	MA13159-STD2	5156	41609	3840	2638
09:49	MA13159-STD3	4755	38095	3634	2319
09:52	MA13159-STD4	4503	36749	3546	2107
09:57	MA13159-HSTD1	4568	37155	3548	2134
10:03	MA13159-ICV1	4786	38335	3595	2317
10:10	MA13159-ICB1	5098 R	40035 R	3542 R	2731 R
10:14	MA13159-CRIA1	5076	39511	3604	2629
10:20	MA13159-ICSA1	4601	34644	3341	2109
10:25	MA13159-ICSAB1	4381	34378	3364	1994
10:33	MA13159-CCV1	4837	38455	3605	2308
10:40	MA13159-CCB1	5142	41006	3699	2727
10:44	ZZZZZZ	4970	39221	3654	2635
10:48	FA33720-1	5439	42836	4024	2220
10:52	FA33720-2	6004	47816	4466 !	2438
10:57	ZZZZZZ	4959	39161	3636	2451
11:01	ZZZZZZ	6110	48331	4331	2656
11:06	ZZZZZZ	5022	40943	3662	2673
11:10	ZZZZZZ	4983	39346	3587	2516
11:15	MP30353-MB1	5083	40795	3622	2677
11:19	MP30353-B1	4919	38988	3520	2415
11:28	MA13159-CCV2	4883	38693	3546	2302
11:32	MA13159-CCB2	5100	40719	3647	2677
11:37	MP30353-D1	4943	39278	3545	2499
11:45	MP30353-PS1	4927	38796	3577	2477
11:50	MP30353-S1	4878	38449	3531	2429
11:54	MP30353-S2	4915	38837	3545	2443
11:58	ZZZZZZ	4734	37176	3486	2313
12:03	ZZZZZZ	4733	37173	3465	2316
12:07	ZZZZZZ	4761	38266	3482	2362
12:12	ZZZZZZ	4746	37429	3499	2318
12:16	ZZZZZZ	4967	39477	3567	2530
12:20	MA13159-CCV3	4895	38798	3541	2307

INTERNAL STANDARD SUMMARY

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SA051316M1.ICP Date Analyzed: 05/13/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13159
Parameters: Sb,As,Be,Cu,Pb,Ni,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
12:25	MA13159-CCB3	5109	40568	3652	2681
12:29	ZZZZZZ	4551	35801	3418	2160
12:34	ZZZZZZ	4840	37782	3506	2369
12:38	ZZZZZZ	4693	36244	3499	2235
12:43	ZZZZZZ	4982	39636	3554	2543
12:47	ZZZZZZ	4038	30491	3309	1825
12:52	ZZZZZZ	4848	38514	3531	2393
12:56	ZZZZZZ	4781	37833	3459	2362
13:01	ZZZZZZ	4535	35470	3424	2139
13:05	ZZZZZZ	4991	39511	3531	2540
13:10	ZZZZZZ	4711	36957	3516	2208
13:14	MA13159-CCV4	4856	38488	3478	2292
13:19	MA13159-CCB4	5151	40928	3611	2700
13:47	MA13159-CCV5	4854	38294	3479	2281
13:53	MA13159-CCB5	5063	39989	3567	2672
14:02	MA13159-ICV2	4830	38150	3471	2289
14:13	ZZZZZZ	5018	39455	3524	2543
14:22	ZZZZZZ	4976	39353	3588	2499
14:32	MA13159-CRIA2	5075	39583	3533	2597
14:36	MP30353-SD1	5075	40057	3577	2629
14:40	MP30354-MB1	5132	40776	3578	2701
14:45	MP30354-B1	4922	38901	3513	2416
14:49	FA33866-1	4772	37764	3483	2409
14:54	MP30354-D1	4733	37429	3443	2383
14:58	MA13159-CCV6	4858	38322	3497	2310
15:02	MA13159-CCB6	5094	40563	3623	2703
15:07	MP30354-SD1	4951	39158	3547	2580
15:11	MP30354-PS1	4691	37037	3480	2326
15:16	MP30354-S1	4723	37073	3404	2238
15:20	MP30354-S2	4794	37575	3448	2273
15:24	ZZZZZZ	4842	38319	3493	2463
15:29	ZZZZZZ	4742	37580	3465	2401
15:33	ZZZZZZ	4729	37524	3433	2384

INTERNAL STANDARD SUMMARY

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SA051316M1.ICP Date Analyzed: 05/13/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13159
Parameters: Sb,As,Be,Cu,Pb,Ni,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
15:38	ZZZZZZ	4794	37950	3466	2422
15:42	ZZZZZZ	4812	38251	3507	2438
15:47	ZZZZZZ	4869	38592	3433	2452
15:51	MA13159-CCV7	4795	37600	3384	2273
15:55	MA13159-CCB7	5052	39936	3538	2658
16:00	ZZZZZZ	4678	36505	3363	2335
16:04	ZZZZZZ	4712	36995	3448	2307
16:09	ZZZZZZ	4774	37665	3439	2385
16:13	ZZZZZZ	4829	38352	3463	2442
16:18	ZZZZZZ	4812	38015	3408	2447
16:22	ZZZZZZ	4970	39142	3490	2560
16:27	ZZZZZZ	4960	39095	3484	2533
16:31	ZZZZZZ	4797	37721	3454	2382
16:36	ZZZZZZ	4820	37791	3455	2405
16:40	ZZZZZZ	4845	37882	3425	2453
16:45	MA13159-CCV8	4875	38120	3435	2291
16:49	MA13159-CCB8	5023	39421	3457	2623
16:54	ZZZZZZ	4781	37014	3388	2364
16:58	ZZZZZZ	4992	39066	3467	2532
17:03	ZZZZZZ	4978	39140	3531	2521
17:07	MP30355-MB1	5093	40463	3566	2689
17:12	MP30355-B1	4949	38668	3473	2423
17:16	MP30355-B2	4976	38861	3433	2426
17:20	ZZZZZZ	5097	40508	3498	2708
17:25	ZZZZZZ	5066	39823	3401	2687
17:29	ZZZZZZ	5009	39809	3438	2671
17:34	ZZZZZZ	5077	39983	3419	2718
17:38	MA13159-CCV9	4920	38655	3486	2328
17:42	MA13159-CCB9	5113	40195	3523	2669
17:47	ZZZZZZ	5072	40000	3463	2694
17:51	ZZZZZZ	5039	39804	3432	2723
17:56	MA13159-CRIA3	5012	39691	3522	2576
18:00	MA13159-ICSA2	4522	34313	3259	2032

INTERNAL STANDARD SUMMARY

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SA051316M1.ICP Date Analyzed: 05/13/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13159
Parameters: Sb,As,Be,Cu,Pb,Ni,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
18:05	MA13159-ICSAB2	4531	34952	3290	2019
18:09	MA13159-CCV10	4900	38374	3474	2309
18:14	MA13159-CCB10	5096	40272	3540	2664

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium (2243)	60-125 %
Istd#2	Yttrium (3600)	60-125 %
Istd#3	Yttrium (3710)	60-125 %
Istd#4	Indium	60-125 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SA051316M1.ICP Date Analyzed: 05/13/16 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA13159 Units: ug/l

Time: / Sample ID:			10:10 ICB1		10:40 CCB1		11:32 CCB2		12:25 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14								
Antimony	6.0	1	0.80	<6.0	1.3	<6.0	1.3	<6.0	2.0	<6.0
Arsenic	10	1.3	0.60	<10	0.90	<10	1.1	<10	0.40	<10
Barium	200	1	anr							
Beryllium	4.0	.2	0.20	<4.0	0.10	<4.0	0.30	<4.0	0.30	<4.0
Cadmium	5.0	.2	anr							
Calcium	1000	50								
Chromium	10	1	anr							
Cobalt	50	.2								
Copper	25	1	0.30	<25	0.10	<25	0.40	<25	0.10	<25
Iron	300	17	anr							
Lead	5.0	1	0.10	<5.0	-0.50	<5.0	0.20	<5.0	-0.10	<5.0
Magnesium	5000	35								
Manganese	15	.5	anr							
Molybdenum	50	.3								
Nickel	40	.4	-0.10	<40	0.0	<40	-0.10	<40	0.0	<40
Potassium	10000	200								
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500	anr							
Strontium	10	.5								
Thallium	10	1.1								
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5	anr							
Zinc	20	3	-0.10	<20	0.30	<20	0.40	<20	0.30	<20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SA051316M1.ICP Date Analyzed: 05/13/16 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA13159 Units: ug/l

Time: / Sample ID:			13:19 CCB4		13:53 CCB5		15:02 CCB6		15:55 CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14								
Antimony	6.0	1	0.80	<6.0	1.7	<6.0	1.0	<6.0	1.7	<6.0
Arsenic	10	1.3	0.80	<10	0.60	<10	0.0	<10	0.50	<10
Barium	200	1	anr							
Beryllium	4.0	.2	0.20	<4.0	0.10	<4.0	0.40	<4.0	0.30	<4.0
Cadmium	5.0	.2	anr							
Calcium	1000	50								
Chromium	10	1	anr							
Cobalt	50	.2								
Copper	25	1	0.10	<25	0.40	<25	0.50	<25	0.30	<25
Iron	300	17	anr							
Lead	5.0	1	0.10	<5.0	0.60	<5.0	0.70	<5.0	0.80	<5.0
Magnesium	5000	35								
Manganese	15	.5	anr							
Molybdenum	50	.3								
Nickel	40	.4	-0.20	<40	0.0	<40	0.20	<40	0.0	<40
Potassium	10000	200								
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500	anr							
Strontium	10	.5								
Thallium	10	1.1								
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5	anr							
Zinc	20	3	0.30	<20	0.20	<20	0.30	<20	0.30	<20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SA051316M1.ICP Date Analyzed: 05/13/16 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA13159 Units: ug/l

Time: / Sample ID: / Metal	RL	IDL	16:49 CCB8 raw	final	17:42 CCB9 raw	final	18:14 CCB10 raw	final
Aluminum	200	14						
Antimony	6.0	1	1.7	<6.0	0.40	<6.0	1.9	<6.0
Arsenic	10	1.3	-0.10	<10	0.30	<10	-0.10	<10
Barium	200	1	anr					
Beryllium	4.0	.2	0.10	<4.0	0.20	<4.0	0.20	<4.0
Cadmium	5.0	.2	anr					
Calcium	1000	50						
Chromium	10	1	anr					
Cobalt	50	.2						
Copper	25	1	0.20	<25	0.50	<25	0.30	<25
Iron	300	17	anr					
Lead	5.0	1	0.90	<5.0	0.30	<5.0	0.70	<5.0
Magnesium	5000	35						
Manganese	15	.5	anr					
Molybdenum	50	.3						
Nickel	40	.4	-0.10	<40	-0.10	<40	-0.10	<40
Potassium	10000	200						
Selenium	10	2.4	anr					
Silver	10	.7	anr					
Sodium	10000	500	anr					
Strontium	10	.5						
Thallium	10	1.1						
Tin	50	.9						
Titanium	10	.5						
Vanadium	50	.5	anr					
Zinc	20	3	0.40	<20	0.50	<20	0.40	<20

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SA051316M1.ICP Date Analyzed: 05/13/16 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA13159 Units: ug/l

Time:		10:03			10:33			11:28	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony	2000	1990	99.5	2000	1920	96.0	2000	1900	95.0
Arsenic	2000	1980	99.0	2000	1930	96.5	2000	1900	95.0
Barium	anr								
Beryllium	2000	2060	103.0	2000	1970	98.5	2000	1980	99.0
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper	2000	1980	99.0	2000	2000	100.0	2000	2010	100.5
Iron	anr								
Lead	2000	2020	101.0	2000	1970	98.5	2000	1970	98.5
Magnesium									
Manganese	anr								
Molybdenum									
Nickel	2000	2040	102.0	2000	1960	98.0	2000	1930	96.5
Potassium									
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium									
Tin									
Titanium									
Vanadium	anr								
Zinc	2000	2060	103.0	2000	1960	98.0	2000	1920	96.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SA051316M1.ICP Date Analyzed: 05/13/16 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA13159 Units: ug/l

Time:		12:20			13:14			13:47	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony	2000	1900	95.0	2000	1910	95.5	2000	2000	100.0
Arsenic	2000	1890	94.5	2000	1900	95.0	2000	2010	100.5
Barium	anr								
Beryllium	2000	1970	98.5	2000	2010	100.5	2000	2010	100.5
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper	2000	2010	100.5	2000	2030	101.5	2000	2000	100.0
Iron	anr								
Lead	2000	1960	98.0	2000	1970	98.5	2000	1990	99.5
Magnesium									
Manganese	anr								
Molybdenum									
Nickel	2000	1920	96.0	2000	1930	96.5	2000	2030	101.5
Potassium									
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium									
Tin									
Titanium									
Vanadium	anr								
Zinc	2000	1900	95.0	2000	1920	96.0	2000	2040	102.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SA051316M1.ICP Date Analyzed: 05/13/16 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA13159 Units: ug/l

Time:		14:02			14:58			15:51	
Sample ID:	ICV	ICV2		CCV	CCV6		CCV	CCV7	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony	2000	2050	102.5	2000	2010	100.5	2000	2030	101.5
Arsenic	2000	2030	101.5	2000	2020	101.0	2000	2030	101.5
Barium	anr								
Beryllium	2000	2080	104.0	2000	2010	100.5	2000	2060	103.0
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper	2000	2010	100.5	2000	1990	99.5	2000	2040	102.0
Iron	anr								
Lead	2000	2030	101.5	2000	1980	99.0	2000	2000	100.0
Magnesium									
Manganese	anr								
Molybdenum									
Nickel	2000	2090	104.5	2000	2040	102.0	2000	2050	102.5
Potassium									
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium									
Tin									
Titanium									
Vanadium	anr								
Zinc	2000	2090	104.5	2000	2060	103.0	2000	2060	103.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SA051316M1.ICP Date Analyzed: 05/13/16 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA13159 Units: ug/l

Time:		16:45			17:38			18:09	
Sample ID:	CCV	CCV8		CCV	CCV9		CCV	CCV10	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony	2000	1990	99.5	2000	1990	99.5	2000	1990	99.5
Arsenic	2000	1980	99.0	2000	1970	98.5	2000	1970	98.5
Barium	anr								
Beryllium	2000	2020	101.0	2000	2010	100.5	2000	2010	100.5
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper	2000	2010	100.5	2000	2030	101.5	2000	2020	101.0
Iron	anr								
Lead	2000	1970	98.5	2000	1930	96.5	2000	1940	97.0
Magnesium									
Manganese	anr								
Molybdenum									
Nickel	2000	2000	100.0	2000	1980	99.0	2000	1980	99.0
Potassium									
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium									
Tin									
Titanium									
Vanadium	anr								
Zinc	2000	2010	100.5	2000	1960	98.0	2000	1970	98.5

(*) Outside of QC limits
(anr) Analyte not requested

HIGH STANDARD CHECK SUMMARY

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SA051316M1.ICP Date Analyzed: 05/13/16 Methods: SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA13159 Units: ug/l

Time:		09:57	
Sample ID:	HSTD	HSTD1	
Metal	True	Results	% Rec
Aluminum			
Antimony	4000	4020	100.5
Arsenic	4000	4020	100.5
Barium	anr		
Beryllium	4000	4010	100.3
Cadmium	anr		
Calcium			
Chromium	anr		
Cobalt			
Copper	4000	4000	100.0
Iron	anr		
Lead	4000	4030	100.8
Magnesium			
Manganese	anr		
Molybdenum			
Nickel	4000	3970	99.3
Potassium			
Selenium	anr		
Silver	anr		
Sodium	anr		
Strontium			
Thallium			
Tin			
Titanium			
Vanadium	anr		
Zinc	4000	3960	99.0

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SA051316M1.ICP Date Analyzed: 05/13/16 Methods: SW846 6010C
QC Limits: CRI 70-130% CRIA 70-130% Run ID: MA13159 Units: ug/l

Time:			10:14		14:32		17:56	
Sample ID:	CRI	CRIA	CRIA1		CRIA2		CRIA3	
Metal	True	True	Results	% Rec	Results	% Rec	Results	% Rec
Aluminum	400	200						
Antimony	10	5.0	5.0	100.0			6.9	138.0*(a
Arsenic	20	10	11.1	111.0			9.8	98.0
Barium	400	200	anr					
Beryllium	10	5.0	5.2	104.0			5.2	104.0
Cadmium	10	5.0	anr					
Calcium	2000	1000						
Chromium	20	10	anr					
Cobalt	100	50						
Copper	50	25	26.8	107.2			28.2	112.8
Iron	600	300	anr					
Lead	10	5.0	4.7	94.0			5.6	112.0
Magnesium	10000	5000						
Manganese	30	15	anr					
Molybdenum	100	50						
Nickel	80	40	43.1	107.8			43.2	108.0
Potassium	20000	10000						
Selenium	20	10	anr					
Silver	20	10	anr					
Sodium	20000	10000	anr					
Strontium	20	10						
Thallium	20	10						
Tin	100	50						
Titanium	20	10						
Vanadium	100	50	anr					
Zinc	40	20	22.8	114.0			21.1	105.5

(*) Outside of QC limits
(anr) Analyte not requested
(a) Possible instrument baseline drift.

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SA051316M1.ICP Date Analyzed: 05/13/16 Methods: SW846 6010C
QC Limits: 80 to 120 % Recovery Run ID: MA13159 Units: ug/l

Time:			10:20		10:25		18:00		18:05	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1		ICSA2		ICSAB2	
Metal	True	True	Results	% Rec	Results	% Rec	Results	% Rec	Results	% Rec
Aluminum	500000	500000	523000	104.6	520000	104.0	518000	103.6	521000	104.2
Antimony		1000	1.4		1020	102.0	-0.90		1030	103.0
Arsenic		1000	0.40		1080	108.0	1.8		1080	108.0
Barium		500	-0.50		538	107.6	-0.30		527	105.4
Beryllium		500	0.10		517	103.4	-0.20		516	103.2
Cadmium		1000	0.0		967	96.7	0.10		946	94.6
Calcium	500000	500000	508000	101.6	504000	100.8	494000	98.8	489000	97.8
Chromium		500	-0.50		517	103.4	-0.10		512	102.4
Cobalt		500	-0.30		483	96.6	-0.10		475	95.0
Copper		500	-2.0		556	111.2	-0.30		560	112.0
Iron	200000	200000	185000	92.5	186000	93.0	185000	92.5	184000	92.0
Lead		1000	0.10		985	98.5	-2.0		954	95.4
Magnesium	500000	500000	546000	109.2	535000	107.0	533000	106.6	523000	104.6
Manganese		500	-0.30		512	102.4	-0.50		512	102.4
Molybdenum		1000	-0.30		955	95.5	0.0		934	93.4
Nickel		1000	-0.80		957	95.7	-0.90		947	94.7
Potassium			48.9		54.7		61.5		58.6	
Selenium		1000	0.0		1020	102.0	-5.1		1020	102.0
Silver		1000	0.70		1070	107.0	0.40		1040	104.0
Sodium			189		245		204		224	
Strontium		1000	-0.20		1030	103.0	0.30		1030	103.0
Thallium		1000	-0.50		967	96.7	-0.60		944	94.4
Tin		1000	1.5		953	95.3	1.2		914	91.4
Titanium		1000	0.20		1000	100.0	0.60		1010	101.0
Vanadium		500	-0.70		472	94.4	0.40		463	92.6
Zinc		1000	-3.6		955	95.5	-3.6		937	93.7

(*) Outside of QC limits
(anr) Analyte not requested

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SA051616M1.ICP Date Analyzed: 05/16/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13162
Parameters: Be

Time	Sample Description	Dilution Factor	PS Recov	Comments
10:22	MA13162-STD1	1		STDA
10:26	MA13162-STD2	1		STDB
10:29	MA13162-STD3	1		STDC
10:33	MA13162-STD4	1		STDD
10:38	MA13162-HSTD1	1		
10:46	MA13162-ICV1	1		
10:53	MA13162-ICB1	1		
10:58	MA13162-CRIA1	1		
11:05	MA13162-ICSA1	1		
11:13	MA13162-ICSAB1	1		
11:26	MA13162-CCV1	1		
11:35	MA13162-CCB1	1		
11:40	FA33720-2	10		
---------->	Last reportable sample/prep for job FA33720			
11:49	MP30353-D1	1		
11:53	MP30353-S1	1		
11:58	MP30353-S2	1		
12:02	MP30353-PS1	1		
12:07	MP30353-SD1	5		
12:11	ZZZZZZ	4		
12:15	ZZZZZZ	2		
12:20	ZZZZZZ	5		
12:24	MA13162-CCV2	1		
12:29	MA13162-CCB2	1		
12:33	ZZZZZZ	50		
12:38	ZZZZZZ	2		
12:42	ZZZZZZ	5		
12:47	ZZZZZZ	5		
12:51	ZZZZZZ	10		
12:56	MA13162-CCV3	1		
13:00	MA13162-CCB3	1		
13:19	MP30360-MB1	1		
13:24	MP30360-B1	1		
13:28	FA33863-1	1		(sample used for QC only; not part of login FA33720)

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SA051616M1.ICP Date Analyzed: 05/16/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13162
Parameters: Be

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:32	MP30360-D1	1		
13:37	MP30360-SD1	5		
13:41	MP30360-PS1	1		
13:45	MP30360-S1	1		
13:50	MP30360-S2	1		
13:54	ZZZZZZ	1		
13:58	ZZZZZZ	1		
14:02	MA13162-CCV4	1		
14:07	MA13162-CCB4	1		
14:11	ZZZZZZ	1		
14:15	ZZZZZZ	1		
14:20	ZZZZZZ	1		
14:25	ZZZZZZ	1		
14:29	ZZZZZZ	1		
14:34	ZZZZZZ	1		
14:38	ZZZZZZ	1		
14:42	ZZZZZZ	1		
14:47	ZZZZZZ	1		
14:51	ZZZZZZ	1		
14:56	MA13162-CCV5	1		
15:00	MA13162-CCB5	1		
15:05	ZZZZZZ	1		
15:09	ZZZZZZ	1		
15:14	ZZZZZZ	1		
15:18	ZZZZZZ	25		
15:23	ZZZZZZ	25		
15:28	ZZZZZZ	25		
15:32	ZZZZZZ	25		
15:50	MA13162-CCV6	1		
15:54	MA13162-CCB6	1		
16:38	MA13162-CRIA2	1		
16:43	MA13162-CCV7	1		
16:47	MA13162-CCB7	1		

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SA051616M1.ICP Date Analyzed: 05/16/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13162
Parameters: Be

Time	Sample Description	Dilution Factor	PS Recov	Comments
16:52	MA13162-ICSA2	1		
16:56	MA13162-ICSAB2	1		
17:19	MA13162-CCV8	1		
17:23	MA13162-CCB8	1		

----------> Last reportable CCB for job FA33720
Refer to raw data for calibration curve and standards.

INTERNAL STANDARD SUMMARY

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SA051616M1.ICP Date Analyzed: 05/16/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13162
Parameters: Be

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
10:22	MA13162-STD1	4775	40652	3881	2666
10:26	MA13162-STD2	4594	38484	3713	2446
10:29	MA13162-STD3	4439	37548	3693	2227
10:33	MA13162-STD4	4340	37148	3660	2094
10:38	MA13162-HSTD1	4366	37254	3716	2100
10:46	MA13162-ICV1	4499	37846	3715	2261
10:53	MA13162-ICB1	4703 R	39133 R	3759 R	2593 R
10:58	MA13162-CRIA1	4731	38378	3763	2525
11:05	MA13162-ICSA1	4125	33326	3489	1979
11:13	MA13162-ICSAB1	4073	33130	3494	1938
11:26	MA13162-CCV1	4373	37035	3680	2215
11:35	MA13162-CCB1	4676	39814	3842	2619
11:40	FA33720-2	4628	38947	3858	2221
11:49	MP30353-D1	4247	36061	3687	2238
11:53	MP30353-S1	4254	36121	3640	2177
11:58	MP30353-S2	4207	35541	3622	2165
12:02	MP30353-PS1	4271	35840	3679	2241
12:07	MP30353-SD1	4572	38605	3795	2463
12:11	ZZZZZZ	4539	38308	3801	2403
12:15	ZZZZZZ	4589	38657	3799	2435
12:20	ZZZZZZ	4611	38454	3812	2450
12:24	MA13162-CCV2	4473	37850	3709	2250
12:29	MA13162-CCB2	4791	40501	3854	2659
12:33	ZZZZZZ	4691	39130	3847	2514
12:38	ZZZZZZ	4440	37333	3763	2252
12:42	ZZZZZZ	4621	38848	3814	2425
12:47	ZZZZZZ	4587	38691	3783	2422
12:51	ZZZZZZ	4628	38900	3801	2462
12:56	MA13162-CCV3	4520	37545	3681	2267
13:00	MA13162-CCB3	4742	40095	3773	2633
13:19	MP30360-MB1	4610	39325	3769	2609
13:24	MP30360-B1	4508	38102	3711	2356
13:28	FA33863-1	4926	40516	3877	2381

INTERNAL STANDARD SUMMARY

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SA051616M1.ICP Date Analyzed: 05/16/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13162
Parameters: Be

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
13:32	MP30360-D1	4919	41348	3927	2356
13:37	MP30360-SD1	4736	39899	3798	2519
13:41	MP30360-PS1	4875	40123	3908	2348
13:45	MP30360-S1	4816	40389	3964	2240
13:50	MP30360-S2	4733	39759	3870	2201
13:54	ZZZZZZ	5045	42167	4044	2420
13:58	ZZZZZZ	4838	41049	4003	2357
14:02	MA13162-CCV4	4440	37397	3683	2235
14:07	MA13162-CCB4	4677	39683	3750	2611
14:11	ZZZZZZ	4728	40069	3827	2361
14:15	ZZZZZZ	4194	35543	3814	1787
14:20	ZZZZZZ	4280	36149	3862	1813
14:25	ZZZZZZ	4764	40421	3832	2507
14:29	ZZZZZZ	4763	40562	3830	2541
14:34	ZZZZZZ	5042	42651	4090	2445
14:38	ZZZZZZ	5351	45799	4418	2415
14:42	ZZZZZZ	5823	49421 !	4818 !	2278
14:47	ZZZZZZ	19841 !	165270 !	15601 !	2312
14:51	ZZZZZZ	4700	39209	3823	2106
14:56	MA13162-CCV5	4618	38513	3709	2296
15:00	MA13162-CCB5	4778	40107	3747	2631
15:05	ZZZZZZ	4392	37250	4085	1611
15:09	ZZZZZZ	4896	40815	4169	1809
15:14	ZZZZZZ	4863	41029	4357	1806
15:18	ZZZZZZ	4424	39741	3756	2491
15:23	ZZZZZZ	4093	39724	3766	2485
15:28	ZZZZZZ	4414	39817	3810	2507
15:32	ZZZZZZ	4340	39815	3831	2525
15:50	MA13162-CCV6	4529	37922	3677	2264
15:54	MA13162-CCB6	4750	39835	3783	2641
16:38	MA13162-CRIA2	4662	38911	3706	2532
16:43	MA13162-CCV7	4452	37278	3677	2246
16:47	MA13162-CCB7	4596	38724	3650	2577

INTERNAL STANDARD SUMMARY

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SA051616M1.ICP Date Analyzed: 05/16/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13162
Parameters: Be

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
16:52	MA13162-ICSA2	4097	33820	3458	1964
16:56	MA13162-ICSAB2	3992	33062	3373	1901
17:19	MA13162-CCV8	4365	36696	3604	2212
17:23	MA13162-CCB8	4635	39150	3738	2604

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium (2243)	60-125 %
Istd#2	Yttrium (3600)	60-125 %
Istd#3	Yttrium (3710)	60-125 %
Istd#4	Indium	60-125 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SA051616M1.ICP Date Analyzed: 05/16/16 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA13162 Units: ug/l

Time: / Sample ID:			10:53 ICB1		11:35 CCB1		12:29 CCB2		13:00 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	anr							
Antimony	6.0	1	anr							
Arsenic	10	1.3	anr							
Barium	200	1	anr							
Beryllium	4.0	.2	-0.20	<4.0	0.10	<4.0	0.20	<4.0	0.20	<4.0
Cadmium	5.0	.2	anr							
Calcium	1000	50	anr							
Chromium	10	1	anr							
Cobalt	50	.2	anr							
Copper	25	1	anr							
Iron	300	17	anr							
Lead	5.0	1	anr							
Magnesium	5000	35	anr							
Manganese	15	.5	anr							
Molybdenum	50	.3	anr							
Nickel	40	.4	anr							
Potassium	10000	200	anr							
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500	anr							
Strontium	10	.5	anr							
Thallium	10	1.1	anr							
Tin	50	.9	anr							
Titanium	10	.5	anr							
Vanadium	50	.5	anr							
Zinc	20	3	anr							

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SA051616M1.ICP Date Analyzed: 05/16/16 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA13162 Units: ug/l

Time: / Sample ID:			14:07 CCB4		15:00 CCB5		15:54 CCB6		16:47 CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	anr							
Antimony	6.0	1	anr							
Arsenic	10	1.3	anr							
Barium	200	1	anr							
Beryllium	4.0	.2	0.10	<4.0	0.30	<4.0	0.20	<4.0	0.0	<4.0
Cadmium	5.0	.2	anr							
Calcium	1000	50	anr							
Chromium	10	1	anr							
Cobalt	50	.2	anr							
Copper	25	1	anr							
Iron	300	17	anr							
Lead	5.0	1	anr							
Magnesium	5000	35	anr							
Manganese	15	.5	anr							
Molybdenum	50	.3	anr							
Nickel	40	.4	anr							
Potassium	10000	200	anr							
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500	anr							
Strontium	10	.5	anr							
Thallium	10	1.1	anr							
Tin	50	.9	anr							
Titanium	10	.5	anr							
Vanadium	50	.5	anr							
Zinc	20	3	anr							

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SA051616M1.ICP Date Analyzed: 05/16/16 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA13162 Units: ug/l

Time:			17:23	
Sample ID:			CCB8	
Metal	RL	IDL	raw	final
Aluminum	200	14	anr	
Antimony	6.0	1	anr	
Arsenic	10	1.3	anr	
Barium	200	1	anr	
Beryllium	4.0	.2	0.0	<4.0
Cadmium	5.0	.2	anr	
Calcium	1000	50	anr	
Chromium	10	1	anr	
Cobalt	50	.2	anr	
Copper	25	1	anr	
Iron	300	17	anr	
Lead	5.0	1	anr	
Magnesium	5000	35	anr	
Manganese	15	.5	anr	
Molybdenum	50	.3	anr	
Nickel	40	.4	anr	
Potassium	10000	200	anr	
Selenium	10	2.4	anr	
Silver	10	.7	anr	
Sodium	10000	500	anr	
Strontium	10	.5	anr	
Thallium	10	1.1	anr	
Tin	50	.9	anr	
Titanium	10	.5	anr	
Vanadium	50	.5	anr	
Zinc	20	3	anr	

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SA051616M1.ICP Date Analyzed: 05/16/16 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA13162 Units: ug/l

Time:		10:46			11:26			12:24	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	2000	2100	105.0	2000	2040	102.0	2000	2000	100.0
Cadmium	anr								
Calcium	anr								
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	anr								
Magnesium	anr								
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium	anr								
Thallium	anr								
Tin	anr								
Titanium	anr								
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SA051616M1.ICP Date Analyzed: 05/16/16 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA13162 Units: ug/l

Time:		12:56			14:02			14:56	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	2000	2020	101.0	2000	2060	103.0	2000	1980	99.0
Cadmium	anr								
Calcium	anr								
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	anr								
Magnesium	anr								
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium	anr								
Thallium	anr								
Tin	anr								
Titanium	anr								
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SA051616M1.ICP Date Analyzed: 05/16/16 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA13162 Units: ug/l

Time:		15:50			16:43			17:19	
Sample ID:	CCV	CCV6		CCV	CCV7		CCV	CCV8	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	2000	2010	100.5	2000	2020	101.0	2000	2070	103.5
Cadmium	anr								
Calcium	anr								
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	anr								
Magnesium	anr								
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium	anr								
Thallium	anr								
Tin	anr								
Titanium	anr								
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

HIGH STANDARD CHECK SUMMARY

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SA051616M1.ICP Date Analyzed: 05/16/16 Methods: SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA13162 Units: ug/l

Time:		10:38	
Sample ID:	HSTD	HSTD1	
Metal	True	Results	% Rec
Aluminum	anr		
Antimony	anr		
Arsenic	anr		
Barium	anr		
Beryllium	4000	3980	99.5
Cadmium	anr		
Calcium	anr		
Chromium	anr		
Cobalt	anr		
Copper	anr		
Iron	anr		
Lead	anr		
Magnesium	anr		
Manganese	anr		
Molybdenum	anr		
Nickel	anr		
Potassium	anr		
Selenium	anr		
Silver	anr		
Sodium	anr		
Strontium	anr		
Thallium	anr		
Tin	anr		
Titanium	anr		
Vanadium	anr		
Zinc	anr		

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SA051616M1.ICP Date Analyzed: 05/16/16 Methods: SW846 6010C
QC Limits: CRI 70-130% CRIA 70-130% Run ID: MA13162 Units: ug/l

Time:			10:58		16:38	
Sample ID:	CRI	CRIA	CRIA1		CRIA2	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	400	200	anr			
Antimony	10	5.0	anr			
Arsenic	20	10	anr			
Barium	400	200	anr			
Beryllium	10	5.0	5.1	102.0	5.0	100.0
Cadmium	10	5.0	anr			
Calcium	2000	1000	anr			
Chromium	20	10	anr			
Cobalt	100	50	anr			
Copper	50	25	anr			
Iron	600	300	anr			
Lead	10	5.0	anr			
Magnesium	10000	5000	anr			
Manganese	30	15	anr			
Molybdenum	100	50	anr			
Nickel	80	40	anr			
Potassium	20000	10000	anr			
Selenium	20	10	anr			
Silver	20	10	anr			
Sodium	20000	10000	anr			
Strontium	20	10	anr			
Thallium	20	10	anr			
Tin	100	50	anr			
Titanium	20	10	anr			
Vanadium	100	50	anr			
Zinc	40	20	anr			

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SA051616M1.ICP Date Analyzed: 05/16/16 Methods: SW846 6010C
QC Limits: 80 to 120 % Recovery Run ID: MA13162 Units: ug/l

Time:			11:05		11:13		16:52		16:56	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1		ICSA2		ICSAB2	
Metal	True	True	Results	% Rec	Results	% Rec	Results	% Rec	Results	% Rec
Aluminum	500000	500000	512000	102.4	526000	105.2	514000	102.8	517000	103.4
Antimony		1000	-1.6		1050	105.0	-1.8		1070	107.0
Arsenic		1000	-1.0		1140	114.0	0.10		1140	114.0
Barium		500	-1.0		531	106.2	-0.80		551	110.2
Beryllium		500	-0.30		521	104.2	-0.30		540	108.0
Cadmium		1000	0.0		1030	103.0	1.2		1010	101.0
Calcium	500000	500000	498000	99.6	502000	100.4	490000	98.0	503000	100.6
Chromium		500	0.0		547	109.4	-0.10		539	107.8
Cobalt		500	-0.30		502	100.4	-0.40		502	100.4
Copper		500	-0.60		546	109.2	1.4		576	115.2
Iron	200000	200000	186000	93.0	188000	94.0	185000	92.5	192000	96.0
Lead		1000	0.30		1020	102.0	-6.5		1010	101.0
Magnesium	500000	500000	543000	108.6	540000	108.0	533000	106.6	546000	109.2
Manganese		500	-0.50		545	109.0	-0.50		534	106.8
Molybdenum		1000	0.0		979	97.9	0.0		967	96.7
Nickel		1000	0.0		1020	102.0	0.10		1010	101.0
Potassium			25.0		8.5		10.8		51.7	
Selenium		1000	0.0		1070	107.0	2.6		1060	106.0
Silver		1000	0.70		1060	106.0	0.60		1090	109.0
Sodium			139		148		149		142	
Strontium		1000	-0.60		1030	103.0	-0.40		1050	105.0
Thallium		1000	0.0		987	98.7	1.8		984	98.4
Tin		1000	1.4		970	97.0	1.2		954	95.4
Titanium		1000	-0.60		1050	105.0	-0.30		1040	104.0
Vanadium		500	-0.50		498	99.6	-0.30		493	98.6
Zinc		1000	-2.2		1040	104.0	-2.4		1010	101.0

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

QC Batch ID: MP30349
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 05/12/16

Metal	RL	IDL	MDL	MB raw	final
Aluminum	10	.7	1.8		
Antimony	1.0	.05	.065	0.065	<1.0
Arsenic	0.50	.065	.1	-0.020	<0.50
Barium	10	.05	.05		
Beryllium	0.25	.01	.025	-0.0050	<0.25
Cadmium	0.20	.01	.025		
Calcium	250	2.5	2.5		
Chromium	0.50	.05	.05		
Cobalt	2.5	.01	.025		
Copper	1.3	.05	.05	-0.0050	<1.3
Iron	15	.85	.85		
Lead	1.0	.05	.05	-0.035	<1.0
Magnesium	250	1.8	1.8		
Manganese	0.75	.025	.025		
Molybdenum	2.5	.015	.025		
Nickel	2.0	.02	.025	0.010	<2.0
Potassium	500	10	10		
Selenium	1.0	.12	.12		
Silver	0.50	.035	.041		
Sodium	500	25	25		
Strontium	0.50	.025	.025		
Thallium	0.50	.055	.055		
Tin	2.5	.045	.045		
Titanium	0.50	.025	.025		
Vanadium	2.5	.025	.025		
Zinc	1.0	.15	.15	0.025	<1.0

Associated samples MP30349: FA33720-1, FA33720-2

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

QC Batch ID: MP30349
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date:			05/12/16					05/12/16	
Metal	FA33828-1 Original	DUP	RPD	QC Limits	FA33828-1 Original	MS	Spikelot MPFLICP2 % Rec		QC Limits
Aluminum									
Antimony	0.12	0.069	54.0 (a)	0-20	0.12	10.4	27.2	37.8N(b)	80-120
Arsenic	0.45	0.45	0.0	0-20	0.45	89.9	109	82.2	80-120
Barium	anr								
Beryllium	0.075	0.069	8.3	0-20	0.075	2.6	2.72	92.8	80-120
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper	63.8	63.4	0.6	0-20	63.8	68.3	13.6	33.1 (c)	80-120
Iron									
Lead	5.0	5.4	7.7	0-20	5.0	31.4	27.2	97.0	80-120
Magnesium									
Manganese									
Molybdenum									
Nickel	1.1	1.2	8.7	0-20	1.1	24.5	27.2	86.0	80-120
Potassium									
Selenium	anr								
Silver	anr								
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc	34.2	40.2	16.1	0-20	34.2	54.7	27.2	75.3N(b)	80-120

Associated samples MP30349: FA33720-1, FA33720-2

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) RPD acceptable due to low duplicate and sample concentrations.
(b) Spike recovery indicates possible matrix interference and/or sample non-homogeneity.
(c) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

QC Batch ID: MP30349 Methods: SW846 6010C
Matrix Type: SOLID Units: mg/kg

Prep Date: 05/12/16

Metal	FA33828-1 Original	MSD	Spikelot MPFLICP2	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony	0.12	8.8	24.1	35.9N(a)	16.7	20
Arsenic	0.45	78.9	96.6	81.2	13.0	20
Barium	anr					
Beryllium	0.075	2.3	2.41	92.2	12.2	20
Cadmium	anr					
Calcium						
Chromium	anr					
Cobalt						
Copper	63.8	87.8	12.1	198.8(b)	25.0 (c)	20
Iron						
Lead	5.0	28.4	24.1	96.9	10.0	20
Magnesium						
Manganese						
Molybdenum						
Nickel	1.1	21.6	24.1	84.9	12.6	20
Potassium						
Selenium	anr					
Silver	anr					
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc	34.2	52.9	24.1	77.4N(a)	3.3	20

Associated samples MP30349: FA33720-1, FA33720-2

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Spike recovery indicates possible matrix interference and/or sample non-homogeneity.
(b) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
(c) High RPD due to possible sample non-homogeneity.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

QC Batch ID: MP30349
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 05/12/16

Metal	BSP Result	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum				
Antimony	24.2	25	96.8	80-120
Arsenic	96.6	100	96.6	80-120
Barium	anr			
Beryllium	2.6	2.5	104.0	80-120
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt				
Copper	13.0	12.5	104.0	80-120
Iron				
Lead	24.6	25	98.4	80-120
Magnesium				
Manganese				
Molybdenum				
Nickel	25.5	25	102.0	80-120
Potassium				
Selenium	anr			
Silver	anr			
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc	25.3	25	101.2	80-120

Associated samples MP30349: FA33720-1, FA33720-2

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

QC Batch ID: MP30349 Methods: SW846 6010C
Matrix Type: SOLID Units: ug/l

Prep Date: 05/12/16

Metal	FA33828-1 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony	2.80	0.00	100.0(a)	0-10
Arsenic	10.2	14.3	40.2 (a)	0-10
Barium	anr			
Beryllium	1.70	1.30	23.5 (a)	0-10
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt				
Copper	1450	1690	16.9*(b)	0-10
Iron				
Lead	113	115	1.8	0-10
Magnesium				
Manganese				
Molybdenum				
Nickel	24.3	30.1	23.9*(b)	0-10
Potassium				
Selenium	anr			
Silver	anr			
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc	776	991	27.6*(b)	0-10

Associated samples MP30349: FA33720-1, FA33720-2

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
(b) Serial dilution indicates possible matrix interference.

POST DIGESTATE SPIKE SUMMARY

Login Number: FA33720
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

QC Batch ID: MP30349
Matrix Type: SOLID

Methods: SW846 6010C
Units: ug/l

Prep Date: 05/12/16

Metal	Sample ml	Final ml	FA33828-1 Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony	9.8	10	2.8	2.744	92.4	0.2	5	100	89.7	80-120
Arsenic	9.8	10	10.2	9.996	98.2	0.2	5	100	88.2	80-120
Barium										
Beryllium	9.8	10	1.7	1.666	47.3	0.2	2.5	50	91.3	80-120
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper	9.8	10	1448	1419.04	1518	0.2	5	100	99.0	80-120
Iron										
Lead	9.8	10	112.9	110.642	161.3	0.2	2.5	50	101.3	80-120
Magnesium										
Manganese										
Molybdenum										
Nickel	9.8	10	24.3	23.814	112	0.2	5	100	88.2	80-120
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc	9.8	10	776.2	760.676	994.4	0.2	12.5	250	93.5	80-120

Associated samples MP30349: FA33720-1, FA33720-2

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(**) Corr. sample result = Raw * (sample volume / final volume)
(anr) Analyte not requested

Instrument Detection Limits

Job Number: FA33720
Account: ARCTXEL Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

Instrument ID: SSTRACE1 **Effective Date:** 01/27/15

Analyte	IDL ug/l
Aluminum	14
Antimony	1
Arsenic	1.3
Barium	1
Beryllium	.2
Cadmium	.2
Calcium	50
Chromium	1
Cobalt	.2
Copper	1
Iron	17
Lead	1
Magnesium	35
Manganese	.5
Molybdenum	.3
Nickel	.4
Potassium	200
Selenium	2.4
Silicon	5
Silver	.7
Sodium	500
Strontium	.5
Sulfur	5
Thallium	1.1
Tin	.9
Titanium	.5
Vanadium	.5
Zinc	3

The above applies to the following instrument runs:
MA13159,MA13162

Instrument Detection Limits

Job Number: FA33720
Account: ARCTXEL Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

Instrument ID: SSTRACE2 **Effective Date:** 01/27/15

Analyte	IDL ug/l
Aluminum	14
Antimony	1
Arsenic	1.3
Barium	1
Beryllium	.2
Cadmium	.2
Calcium	50
Chromium	1
Cobalt	.2
Copper	1
Iron	17
Lead	1
Magnesium	35
Manganese	.5
Molybdenum	.3
Nickel	.4
Potassium	200
Selenium	2.4
Silicon	5
Silver	.7
Sodium	500
Strontium	.5
Sulfur	5
Thallium	1.1
Tin	.9
Titanium	.5
Vanadium	.5
Zinc	3

The above applies to the following instrument runs:
MA13157

Instrument Linear Ranges

Job Number: FA33720
Account: ARCTXEL Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

Instrument ID: SSTRACE1 **Effective Date:** 08/13/13

Analyte	Linear Range ug/l
Aluminum	500000
Antimony	10000
Arsenic	10000
Barium	10000
Beryllium	10000
Cadmium	10000
Calcium	500000
Chromium	10000
Cobalt	10000
Copper	10000
Iron	500000
Lead	10000
Magnesium	500000
Manganese	10000
Molybdenum	10000
Nickel	10000
Potassium	80000
Selenium	10000
Silver	1000
Sodium	80000
Strontium	10000
Sulfur	10000
Thallium	10000
Tin	10000
Titanium	10000
Vanadium	10000
Zinc	10000

The above applies to the following instrument runs:
MA13159,MA13162

Instrument Linear Ranges

Job Number: FA33720
Account: ARCTXEL Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

Instrument ID: SSTRACE2 **Effective Date:** 10/22/10

Analyte	Linear Range ug/l
Aluminum	500000
Antimony	10000
Arsenic	10000
Barium	10000
Beryllium	10000
Cadmium	10000
Calcium	500000
Chromium	10000
Cobalt	10000
Copper	10000
Iron	500000
Lead	10000
Magnesium	500000
Manganese	10000
Molybdenum	10000
Nickel	10000
Potassium	80000
Selenium	10000
Silver	1000
Sodium	80000
Strontium	10000
Thallium	10000
Tin	10000
Titanium	10000
Vanadium	10000
Zinc	10000

The above applies to the following instrument runs:
MA13157

Metals Analysis

Raw Data

Zoom In ▶ Zoom Out

Sample Name: Blank Acquired: 5/12/2016 8:23:10 Type: Cal
Method: 60102007_041712(v118) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.0007	-.0098	-.0004	.0145	.0035	.0053	.0001	.0004	.0001
Stddev	.0001	.0012	.0001	.0017	.0012	.0004	.0001	.0003	.0000
%RSD	13.25	12.09	17.73	12.02	34.42	8.049	163.9	75.20	47.90
#1	-.0006	-.0112	-.0003	.0138	.0048	.0056	.0002	.0001	.0001
#2	-.0008	-.0093	-.0003	.0132	.0025	.0055	.0000	.0006	.0001
#3	-.0007	-.0090	-.0004	.0165	.0032	.0048	.0000	.0004	.0000

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0060	.0024	.0091	.0001	.0010	.0009	.0090	-.0007	-.0020
Stddev	.0001	.0005	.0034	.0002	.0002	.0001	.0063	.0002	.0004
%RSD	1.231	22.69	36.81	362.5	24.40	14.13	70.50	32.30	17.64
#1	.0061	.0018	.0076	.0000	.0012	.0010	.0142	-.0008	-.0023
#2	.0060	.0029	.0130	-.0001	.0009	.0010	.0020	-.0010	-.0022
#3	.0059	.0024	.0068	.0003	.0007	.0008	.0107	-.0005	-.0016

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0004	-.0003	.0033	.0002	.0098	.0011	-.0035	-.0001	.0057
Stddev	.0001	.0003	.0001	.0001	.0013	.0001	.0006	.0001	.0003
%RSD	33.47	96.02	1.981	37.61	13.31	11.55	17.79	192.6	5.176
#1	.0004	-.0003	.0034	.0001	.0090	.0011	-.0028	.0001	.0060
#2	.0005	-.0007	.0033	.0002	.0113	.0012	-.0041	-.0002	.0054
#3	.0003	-.0001	.0033	.0001	.0091	.0010	-.0036	-.0001	.0056

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3113.3	6929.3	58823.	5866.4
Stddev	8.5	20.5	298.	50.0
%RSD	.27313	.29531	.50708	.85254
#1	3116.3	6936.1	59148.	5861.7
#2	3120.0	6945.4	58758.	5918.6
#3	3103.7	6906.2	58562.	5818.9

◀ Zoom In ▶ Zoom Out

Sample Name: LowStd Acquired: 5/12/2016 8:31:17 Type: Cal
Method: 60102007_041712(v118) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0348	1.517	.1202	6.416	3.510	2.347	2.554	1.223	.2146	.3310
Stddev	.0001	.009	.0004	.029	.016	.011	.005	.002	.0005	.0016
%RSD	.3348	.5712	.3014	.4437	.4414	.4557	.2086	.2004	.2539	.4807
#1	.0348	1.509	.1201	6.397	3.495	2.341	2.554	1.223	.2140	.3307
#2	.0349	1.514	.1198	6.402	3.510	2.341	2.549	1.220	.2151	.3327
#3	.0346	1.526	.1206	6.449	3.526	2.359	2.559	1.225	.2147	.3295

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.481	1.271	.2131	1.430	.6739	3.607	.8362	.5922	.1316	.0857
Stddev	.005	.009	.0009	.002	.0025	.024	.0021	.0014	.0003	.0003
%RSD	.3401	.6765	.4363	.1379	.3663	.6725	.2468	.2445	.2190	.3857
#1	1.477	1.271	.2125	1.428	.6736	3.593	.8371	.5908	.1315	.0854
#2	1.479	1.263	.2126	1.429	.6716	3.592	.8338	.5921	.1314	.0859
#3	1.487	1.280	.2141	1.432	.6765	3.635	.8375	.5937	.1320	.0859

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.2130	.2978	7.987	.9150	.2727	.3253	1.616
Stddev	.0005	.0003	.054	.0006	.0014	.0003	.003
%RSD	.2276	.1102	.6814	.0626	.5168	.0988	.2064
#1	.2130	.2977	7.944	.9148	.2711	.3250	1.617
#2	.2125	.2976	7.969	.9157	.2730	.3256	1.612
#3	.2134	.2982	8.048	.9146	.2739	.3253	1.619

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2892.6	6937.8	57117.	5862.6
Stddev	6.4	12.8	315.	32.8
%RSD	.21953	.18377	.55164	.55876
#1	2892.0	6932.9	57053.	5827.2
#2	2899.2	6952.3	57459.	5891.8
#3	2886.6	6928.3	56839.	5868.8

◀ Zoom In ▶ Zoom Out

Sample Name: MidStd Acquired: 5/12/2016 8:35:27 Type: Cal
Method: 60102007_041712(v118) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1403	6.605	.5056	26.55	14.82	10.09	10.52	4.969	.8798	1.349
Stddev	.0006	.056	.0002	.18	.12	.08	.02	.009	.0041	.004
%RSD	.4085	.8430	.0447	.6805	.8027	.8123	.1760	.1753	.4611	.2577
#1	.1410	6.571	.5054	26.41	14.75	10.04	10.54	4.979	.8808	1.352
#2	.1400	6.575	.5056	26.47	14.76	10.05	10.51	4.966	.8832	1.348
#3	.1400	6.670	.5059	26.75	14.96	10.19	10.50	4.963	.8753	1.345

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5.988	5.510	.9189	5.872	2.753	15.65	3.388	2.500	.5464	.3578
Stddev	.035	.035	.0076	.013	.000	.13	.003	.009	.0005	.0001
%RSD	.5806	.6262	.8308	.2183	.0135	.8260	.0851	.3598	.0963	.0265
#1	5.970	5.492	.9174	5.868	2.752	15.56	3.392	2.509	.5470	.3578
#2	5.965	5.489	.9121	5.887	2.752	15.59	3.387	2.498	.5459	.3577
#3	6.028	5.550	.9271	5.862	2.753	15.80	3.387	2.492	.5465	.3578

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.9271	1.194	33.24	3.755	1.128	1.332	6.669
Stddev	.0000	.001	.28	.006	.006	.005	.016
%RSD	.0017	.0933	.8463	.1637	.5354	.3674	.2391
#1	.9271	1.196	33.05	3.755	1.134	1.334	6.687
#2	.9271	1.194	33.11	3.762	1.125	1.336	6.663
#3	.9271	1.194	33.57	3.749	1.123	1.327	6.657

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2606.0	6577.7	54159.	5739.4
Stddev	7.2	3.4	132.	46.1
%RSD	.27488	.05153	.24443	.80344
#1	2597.9	6574.1	54217.	5690.8
#2	2608.6	6578.3	54007.	5782.5
#3	2611.5	6580.8	54251.	5745.1

◀ Zoom In ▶ Zoom Out

Sample Name: HighStd Acquired: 5/12/2016 8:38:34 Type: Cal
Method: 60102007_041712(v118) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.2821	13.10	1.030	53.10	28.96	19.77	20.79	9.935	1.740	2.673
Stddev	.0007	.03	.001	.07	.04	.08	.01	.004	.004	.002
%RSD	.2631	.2591	.0892	.1396	.1515	.4174	.0619	.0402	.2447	.0562
#1	.2817	13.14	1.030	53.13	29.01	19.86	20.80	9.939	1.737	2.672
#2	.2829	13.09	1.029	53.15	28.95	19.72	20.78	9.931	1.739	2.675
#3	.2816	13.07	1.031	53.01	28.93	19.72	20.80	9.933	1.745	2.672

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	11.16	10.87	1.783	11.33	5.425	30.67	6.756	5.149	1.113	.7254
Stddev	.03	.03	.013	.07	.005	.10	.005	.008	.001	.0007
%RSD	.2987	.2869	.7082	.6081	.0849	.3187	.0775	.1593	.0620	.0910
#1	11.20	10.90	1.797	11.29	5.422	30.78	6.755	5.156	1.113	.7249
#2	11.16	10.87	1.777	11.29	5.422	30.62	6.751	5.150	1.114	.7252
#3	11.13	10.84	1.774	11.41	5.430	30.60	6.761	5.140	1.113	.7261

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2.311	2.297	63.68	7.166	2.294	2.587	13.17
Stddev	.001	.004	1.46	.058	.004	.006	.01
%RSD	.0365	.1629	2.288	.8124	.1876	.2148	.0643
#1	2.311	2.295	64.94	7.126	2.297	2.582	13.18
#2	2.310	2.295	62.09	7.139	2.295	2.584	13.17
#3	2.311	2.301	64.02	7.232	2.289	2.593	13.18

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2404.9	6304.6	53134.	5766.8
Stddev	4.1	11.2	281.	81.3
%RSD	.17196	.17805	.52930	1.4095
#1	2408.1	6317.5	53289.	5674.4
#2	2400.2	6299.3	53305.	5799.2
#3	2406.3	6297.1	52810.	5827.0

SGS ACCUTEST FA33720

Zoom In Zoom Out

Sample Name: HSTD Acquired: 5/12/2016 8:43:04 Type: QC
Method: 60102007_041712(v118) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4977	80.30	4.046	4.005	3.950	79.74	3.971	3.986	3.985	3.962
Stddev	.0023	.35	.005	.014	.014	.41	.006	.005	.009	.016
%RSD	.4579	.4385	.1329	.3404	.3586	.5115	.1401	.1193	.2176	.4029
#1	.4971	80.67	4.047	4.020	3.966	80.20	3.970	3.989	3.986	3.951
#2	.4958	79.97	4.051	3.994	3.938	79.42	3.977	3.989	3.976	3.954
#3	.5002	80.26	4.040	4.000	3.947	79.59	3.966	3.980	3.993	3.980
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	77.38	79.59	79.22	3.925	3.977	79.55	3.996	4.024	4.034	4.037
Stddev	.26	.44	.30	.021	.005	.44	.005	.006	.005	.004
%RSD	.3376	.5581	.3732	.5362	.1185	.5556	.1366	.1609	.1225	.0932
#1	77.68	80.08	79.54	3.947	3.979	80.05	3.999	4.016	4.039	4.041
#2	77.22	79.21	78.96	3.905	3.980	79.20	3.999	4.027	4.035	4.037
#3	77.24	79.48	79.15	3.922	3.971	79.42	3.990	4.028	4.029	4.034
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.363	3.955	3.920	3.914	3.998	3.942	3.978
Stddev	.009	.009	.012	.006	.009	.008	.005
%RSD	.2045	.2352	.3131	.1467	.2191	.2122	.1387
#1	4.371	3.959	3.931	3.907	3.988	3.940	3.977
#2	4.365	3.961	3.921	3.918	4.002	3.935	3.983
#3	4.353	3.944	3.907	3.916	4.005	3.951	3.972
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: HSTD Acquired: 5/12/2016 8:43:04 Type: QC
Method: 60102007_041712(v118) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2409.3	6287.3	53214.	5761.6
Stddev	2.7	10.0	65.	25.9
%RSD	.11350	.15950	.12152	.44888
#1	2412.4	6281.0	53147.	5742.4
#2	2408.5	6281.9	53276.	5791.0
#3	2407.1	6298.8	53220.	5751.4

Zoom In Zoom Out

Sample Name: ICV Acquired: 5/12/2016 8:53:27 Type: QC
Method: 60102007_041712(v118) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2485	41.74	2.063	2.107	2.051	42.65	2.060	2.077	2.070	2.006
Stddev	.0004	.12	.007	.003	.006	.17	.003	.005	.002	.004
%RSD	.1634	.2937	.3309	.1355	.3101	.3901	.1444	.2241	.1136	.1784
#1	.2480	41.86	2.055	2.110	2.058	42.83	2.057	2.072	2.072	2.007
#2	.2486	41.62	2.068	2.108	2.045	42.50	2.062	2.078	2.068	2.010
#3	.2488	41.74	2.066	2.104	2.048	42.64	2.063	2.082	2.070	2.003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.61	42.02	42.63	2.093	1.948	42.97	2.113	2.018	2.074	2.106
Stddev	.09	.13	.12	.003	.007	.11	.006	.007	.007	.008
%RSD	.2244	.3187	.2755	.1509	.3366	.2654	.2675	.3497	.3451	.3649
#1	40.71	42.18	42.70	2.094	1.941	43.10	2.107	2.017	2.066	2.097
#2	40.59	41.93	42.50	2.089	1.949	42.87	2.115	2.012	2.078	2.111
#3	40.53	41.97	42.70	2.096	1.954	42.96	2.117	2.026	2.079	2.109
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0579	2.128	1.942	1.959	2.093	1.927	2.089
Stddev	.0005	.009	.004	.002	.004	.002	.004
%RSD	.8392	.4056	.2150	.0980	.2060	.0791	.1816
#1	.0580	2.119	1.947	1.959	2.091	1.925	2.085
#2	.0582	2.130	1.940	1.957	2.090	1.927	2.088
#3	.0573	2.136	1.939	1.961	2.098	1.928	2.093
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: ICV Acquired: 5/12/2016 8:53:27 Type: QC
Method: 60102007_041712(v118) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2589.3	6436.0	54823.	5782.8
Stddev	10.3	21.0	122.	51.1
%RSD	.39670	.32657	.22314	.88381
#1	2594.7	6457.6	54838.	5749.1
#2	2595.7	6434.7	54938.	5841.6
#3	2577.4	6415.6	54694.	5757.7

Zoom In Zoom Out

Sample Name: ICB Acquired: 5/12/2016 9:04:31 Type: QC
Method: 60102007_041712(v118) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0025	.0006	-.0004	-.0004	-.0088	.0000	-.0001	.0000	-.0008
Stddev	.000	.0064	.0004	.0003	.0001	.0023	.000	.0001	.000	.0002
%RSD	159.2	258.9	70.93	63.48	36.90	26.34	4.149	72.14	14.70	29.40
#1	.0000	-.0041	.0002	-.0005	-.0004	-.0101	.0000	.0000	.0000	-.0006
#2	.0000	.0029	.0006	-.0006	-.0005	-.0061	.0000	-.0001	.0000	-.0007
#3	-.0001	.0086	.0010	-.0001	-.0002	-.0102	.0000	-.0001	.0000	-.0010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0115	-.0558	.0080	-.0002	-.0001	.0005	.0000	-.0009	-.0006	.0000
Stddev	.0037	.0223	.0152	.0000	.0000	.0101	.0002	.0002	.0006	.0008
%RSD	32.30	39.99	190.7	10.00	37.94	1950.	1448.	25.92	104.3	2454.
#1	-.0084	-.0657	-.0085	-.0002	-.0001	-.0104	.0002	-.0011	-.0006	.0003
#2	-.0156	-.0302	.0215	-.0002	-.0001	.0097	-.0003	-.0007	.0000	.0007
#3	-.0105	-.0714	.0111	-.0002	-.0001	.0022	.0002	-.0007	-.0011	-.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	-.0001	-.0003	.0000	-.0001	-.0002	-.0010
Stddev	.0004	.0001	.0001	.000	.0003	.0003	.0000
%RSD	102.6	130.2	31.61	202.6	262.8	145.0	3.631
#1	.0005	-.0001	-.0004	.0000	-.0002	.0000	-.0010
#2	-.0001	.0000	-.0002	.0000	.0002	-.0005	-.0010
#3	.0006	-.0001	-.0004	-.0001	-.0003	.0000	-.0010
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: ICB Acquired: 5/12/2016 9:04:31 Type: QC
Method: 60102007_041712(v118) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3101.3	6882.0	58466.	5869.9
Stddev	4.8	1.4	440.	14.6
%RSD	.15590	.02055	.75305	.24935
#1	3100.2	6881.5	58888.	5863.8
#2	3097.2	6883.6	58010.	5859.4
#3	3106.6	6880.8	58501.	5886.6

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/12/2016 9:08:03 Type: QC
Method: 60102007_041712(v118) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0091	.2251	.0108	.2112	.0048	1.081	.0054	.0545	.0107
Stddev	.0004	.0162	.0002	.0004	.0001	.002	.0001	.0001	.0001
%RSD	4.090	7.212	2.123	.1912	1.968	.2178	1.220	.2336	.8240
#1	.0094	.2077	.0105	.2109	.0049	1.083	.0053	.0546	.0107
#2	.0092	.2277	.0110	.2117	.0049	1.080	.0053	.0544	.0107
#3	.0087	.2398	.0108	.2111	.0047	1.079	.0054	.0546	.0108
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0264	.3185	10.53	5.400	.0164	.0502	10.71	.0442	F.0040
Stddev	.0003	.0057	.01	.031	.0001	.0001	.02	.0002	.0007
%RSD	1.059	1.791	.1178	.5824	.3621	.1690	.1911	.4398	17.12
#1	.0267	.3132	10.52	5.375	.0165	.0501	10.68	.0443	.0041
#2	.0262	.3246	10.53	5.391	.0164	.0502	10.72	.0443	.0045
#3	.0262	.3177	10.55	5.435	.0165	.0503	10.71	.0440	.0032
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value									.0050
Range									-20.00%

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0045	.0097	.0441	.0550	.0098	.0103	.0095	.0493	.0225
Stddev	.0010	.0008	.0002	.0002	.0001	.0002	.0002	.0003	.0000
%RSD	23.31	7.824	.3851	.2780	.9702	1.808	1.868	.6459	.1996
#1	.0033	.0089	.0443	.0552	.0099	.0102	.0097	.0492	.0225
#2	.0050	.0100	.0440	.0548	.0099	.0105	.0094	.0491	.0225
#3	.0053	.0103	.0441	.0550	.0097	.0102	.0095	.0497	.0226
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/12/2016 9:08:03 Type: QC
Method: 60102007_041712(v118) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2906.9	6720.6	56385.	5807.8
Stddev	5.3	8.8	154.	36.2
%RSD	.18142	.13155	.27341	.62414
#1	2912.9	6722.3	56272.	5803.8
#2	2902.9	6711.0	56561.	5773.7
#3	2905.0	6728.4	56323.	5845.8

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/12/2016 9:14:25 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0004	507.7	.0002	.0003	-.0004	474.4	.0000	-.0005	.0003	-.0015
Stddev	.0002	5.0	.0008	.0000	.0001	4.0	.0002	.0001	.0002	.0002
%RSD	45.59	.9849	319.6	6.569	17.75	.8365	13250.	30.52	48.94	9.862
#1	-.0002	512.1	-.0006	.0003	-.0005	477.4	.0002	-.0006	.0004	-.0017
#2	-.0004	508.6	.0006	.0003	-.0004	469.9	.0000	-.0005	.0004	-.0015
#3	-.0005	502.3	.0007	.0003	-.0004	475.9	-.0001	-.0003	.0001	-.0014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	182.0	-.0045	514.5	-.0006	-.0004	.1819	.0000	-.0006	.0006	.0000
Stddev	.8	.0122	2.6	.0000	.0001	.0132	.0001	.0022	.0013	.0015
%RSD	.4215	269.7	.5149	2.338	28.64	7.265	1640.	387.5	224.3	4238.
#1	182.9	.0057	517.4	-.0007	-.0005	.1675	.0001	-.0024	.0006	-.0015
#2	181.5	-.0181	512.3	-.0006	-.0004	.1935	.0000	-.0011	.0018	.0000
#3	181.6	-.0012	513.8	-.0006	-.0003	.1847	-.0001	.0018	-.0007	.0015
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0131	-.0001	-.0002	-.0003	.0002	-.0007	-.0024
Stddev	.0004	.0003	.0000	.0000	.0003	.0000	.0000
%RSD	3.352	183.0	25.58	5.843	159.8	5.254	1.604
#1	.0132	-.0004	-.0001	-.0004	-.0001	-.0007	-.0025
#2	.0135	-.0001	-.0002	-.0003	.0006	-.0007	-.0024
#3	.0126	.0001	-.0002	-.0003	.0002	-.0006	-.0024
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/12/2016 9:14:25 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2328.9	6125.7	48507.	5599.7
Stddev	6.7	14.9	28.	18.7
%RSD	.28908	.24367	.05762	.33475
#1	2327.4	6112.8	48539.	5578.6
#2	2336.3	6142.0	48494.	5606.2
#3	2323.1	6122.3	48488.	5614.3

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 5/12/2016 9:21:18 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9832	507.2	1.062	.5197	.5064	476.1	.9641	.4778	.5111	.5341
Stddev	.0048	1.0	.001	.0030	.0034	5.9	.0018	.0006	.0051	.0022
%RSD	.4926	.2061	.0794	.5706	.6635	1.247	.1875	.1283	1.000	.4179
#1	.9802	507.0	1.063	.5229	.5102	471.0	.9654	.4783	.5079	.5342
#2	.9888	506.3	1.062	.5171	.5041	474.6	.9648	.4781	.5170	.5363
#3	.9806	508.4	1.062	.5192	.5048	482.6	.9620	.4771	.5084	.5319
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	180.9	-.0061	506.9	.5126	.9385	.1768	.9557	.9603	.9898	.9971
Stddev	1.1	.0063	3.5	.0039	.0007	.0074	.0015	.0012	.0007	.0015
%RSD	.6010	103.0	.6829	.7518	.0727	4.204	.1614	.1300	.0699	.1474
#1	181.9	-.0081	510.9	.5100	.9388	.1697	.9566	.9617	.9900	.9960
#2	179.8	.0009	504.6	.5170	.9390	.1761	.9567	.9600	.9904	.9988
#3	181.0	-.0111	505.1	.5107	.9377	.1845	.9540	.9593	.9891	.9966
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1019	.9144	1.031	1.011	.9569	.4714	.9634
Stddev	.0002	.0022	.007	.005	.0030	.0030	.0022
%RSD	.2450	.2457	.6732	.5243	.3171	.6371	.2245
#1	.1018	.9163	1.039	1.006	.9569	.4697	.9647
#2	.1017	.9149	1.026	1.017	.9538	.4749	.9646
#3	.1021	.9119	1.027	1.010	.9599	.4696	.9609
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 5/12/2016 9:21:18 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2327.1	6198.0	49534.	5605.6
Stddev	1.2	12.9	411.	30.1
%RSD	.05031	.20802	.82917	.53687
#1	2326.7	6195.9	49877.	5572.6
#2	2326.2	6186.3	49079.	5631.6
#3	2328.4	6211.8	49647.	5612.7

SGS ACCUTEST FA33720

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/12/2016 9:28:02 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2495	39.48	1.958	1.978	1.993	39.61	2.007	1.992	1.978	1.998
Stddev	.0004	.04	.006	.002	.002	.04	.001	.002	.006	.002
%RSD	.1738	.0980	.3063	.1163	.1173	.0950	.0453	.0832	.3213	.1169
#1	.2494	39.43	1.956	1.975	1.991	39.57	2.006	1.991	1.983	2.001
#2	.2491	39.50	1.964	1.980	1.995	39.64	2.008	1.994	1.971	1.996
#3	.2499	39.50	1.953	1.979	1.991	39.60	2.007	1.993	1.980	1.997
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.24	40.03	39.86	2.038	2.009	39.66	1.985	1.973	1.964	1.961
Stddev	.05	.04	.09	.007	.005	.02	.003	.004	.005	.005
%RSD	.1304	.1001	.2281	.3560	.2341	.0422	.1248	.2061	.2773	.2627
#1	41.18	40.02	39.95	2.045	2.004	39.67	1.983	1.970	1.959	1.956
#2	41.27	40.07	39.85	2.031	2.011	39.66	1.987	1.977	1.970	1.966
#3	41.27	40.00	39.77	2.039	2.012	39.64	1.984	1.971	1.962	1.962
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.718	2.009	2.030	2.064	1.990	2.012	1.999
Stddev	.003	.005	.004	.005	.007	.006	.001
%RSD	.1976	.2277	.2111	.2313	.3409	.2939	.0497
#1	1.715	2.006	2.030	2.068	1.982	2.017	1.998
#2	1.722	2.014	2.035	2.059	1.992	2.006	2.000
#3	1.718	2.007	2.027	2.065	1.995	2.014	1.999
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/12/2016 9:28:02 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2612.3	6646.2	54654.	5767.7
Stddev	3.7	6.8	384.	17.8
%RSD	.13984	.10300	.70314	.30914
#1	2615.5	6652.2	54396.	5787.1
#2	2608.3	6638.7	55096.	5764.1
#3	2613.2	6647.6	54471.	5752.0

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/12/2016 9:36:00 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0004	.0097	.0004	.0002	.0001	.0124	.0001	.0001	.0003	-.0011
Stddev	.0002	.0063	.0006	.0001	.0000	.0031	.0001	.0001	.0002	.0002
%RSD	57.58	64.31	143.7	56.15	75.18	24.56	92.61	98.40	82.61	18.01
#1	-.0006	.0111	.0010	.0003	.0001	.0153	.0001	.0002	.0005	-.0008
#2	-.0002	.0152	.0006	.0001	.0001	.0128	.0001	.0000	.0000	-.0012
#3	-.0003	.0029	-.0003	.0001	.0000	.0092	.0000	.0001	.0003	-.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0093	-.0626	.0061	.0001	.0000	.0119	.0001	-.0002	.0008	.0006
Stddev	.0030	.0127	.0212	.0001	.000	.0037	.0001	.0001	.0005	.0008
%RSD	31.99	20.30	348.9	88.93	377.7	30.89	87.03	50.51	64.54	143.4
#1	.0099	-.0481	-.0159	.0001	.0001	.0118	.0002	-.0001	.0011	-.0001
#2	.0061	-.0675	.0076	.0001	-.0001	.0157	.0000	-.0002	.0012	.0003
#3	.0119	-.0721	.0265	.0000	-.0001	.0083	.0002	-.0004	.0002	.0014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0002	.0001	.0001	-.0002	.0000	-.0009
Stddev	.0002	.0002	.0001	.0000	.0008	.0002	.0000
%RSD	41.52	96.41	167.3	15.75	502.2	611.7	4.941
#1	.0005	.0001	.0003	.0001	-.0007	-.0002	-.0009
#2	.0002	.0005	.0000	.0002	.0007	.0002	-.0009
#3	.0005	.0001	.0000	.0001	-.0005	.0002	-.0010
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/12/2016 9:36:00 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3090.5	7000.5	57714.	5794.0
Stddev	1.7	6.2	222.	16.3
%RSD	.05344	.08831	.38511	.28129
#1	3092.1	7007.5	57681.	5787.1
#2	3088.8	6998.1	57509.	5812.6
#3	3090.4	6995.8	57950.	5782.2

SGS ACCUTEST FA33720

Zoom In Zoom Out

Sample Name: FA33676-3 Acquired: 5/12/2016 9:39:55 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 20.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0138	.0292	.0095	.0241	-.0065	125.2	-.0028	-.0004	-.0025	-.0165
Stddev	.0065	.2090	.0052	.0007	.0021	.4	.0007	.0030	.0042	.0034
%RSD	46.86	716.2	55.16	2.955	32.83	.3037	24.70	746.5	169.7	20.39
#1	-.0169	-.2120	.0145	.0249	-.0057	125.2	-.0020	-.0010	.0020	-.0141
#2	-.0182	.1565	.0098	.0240	-.0089	125.6	-.0034	.0029	-.0064	-.0150
#3	-.0064	.1430	.0041	.0235	-.0049	124.8	-.0029	-.0031	-.0031	-.0203

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	-.1497	30.30	96.48	.0626	-.0124	981.6	-.0018	.0095	.0013	-.0094
Stddev	.0093	.62	.27	.0007	.0015	1.5	.0006	.0126	.0224	.0401
%RSD	6.228	2.046	.2829	1.187	12.36	.1572	33.94	132.6	1714.	427.8
#1	-.1444	30.32	96.43	.0628	-.0120	982.3	-.0011	.0093	.0144	.0186
#2	-.1604	29.67	96.23	.0617	-.0141	982.6	-.0020	.0221	-.0245	-.0553
#3	-.1442	30.91	96.77	.0632	-.0111	979.8	-.0022	-.0030	.0141	.0086

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	2.347	.0002	.9584	.0022	.0016	-.0021	.1368
Stddev	.003	.0067	.0023	.0015	.0121	.0045	.0012
%RSD	.1466	3443.	.2352	67.65	751.1	213.8	.8764
#1	2.347	.0050	.9574	.0024	.0043	-.0001	.1381
#2	2.343	-.0075	.9610	.0037	.0121	.0010	.1358
#3	2.350	.0031	.9568	.0007	-.0116	-.0073	.1365

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2852.9	6836.7	55322.	5725.7
Stddev	8.1	9.2	111.	27.2
%RSD	.28542	.13472	.20145	.47421
#1	2860.2	6841.1	55297.	5722.5
#2	2854.3	6842.9	55225.	5754.2
#3	2844.1	6826.1	55443.	5700.2

Zoom In Zoom Out

Sample Name: MP30343-D1 Acquired: 5/12/2016 9:44:01 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 20.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0038	.1301	.0088	.0226	-.0092	126.4	-.0027	-.0010	-.0043	-.0153
Stddev	.0083	.1204	.0073	.0017	.0006	.2	.0013	.0016	.0060	.0018
%RSD	218.9	92.52	83.19	7.728	6.907	.1238	49.15	153.9	137.4	11.93
#1	-.0090	.0091	.0087	.0211	-.0099	126.6	-.0012	-.0016	-.0068	-.0148
#2	-.0081	.1315	.0161	.0245	-.0091	126.3	-.0032	.0008	-.0087	-.0138
#3	.0058	.2499	.0015	.0222	-.0086	126.4	-.0037	-.0022	.0025	-.0173

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	-.2036	30.54	97.51	.0618	-.0156	990.4	-.0021	-.0089	-.0010	-.0024
Stddev	.0118	.38	.43	.0010	.0025	2.6	.0022	.0104	.0234	.0188
%RSD	5.784	1.258	.4454	1.538	15.95	.2645	103.7	117.9	2326.	789.3
#1	-.1909	30.16	97.01	.0629	-.0143	992.2	-.0023	-.0182	-.0280	-.0148
#2	-.2056	30.92	97.70	.0615	-.0140	987.4	-.0041	.0024	.0135	.0192
#3	-.2142	30.55	97.81	.0611	-.0185	991.6	.0002	-.0108	.0115	-.0116

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	2.356	-.0063	.9646	.0016	-.0127	-.0097	.1327
Stddev	.005	.0043	.0028	.0025	.0099	.0014	.0004
%RSD	.1942	68.19	.2935	155.5	77.78	14.40	.3343
#1	2.361	-.0086	.9678	-.0001	-.0081	-.0088	.1329
#2	2.354	-.0088	.9625	.0004	-.0060	-.0090	.1330
#3	2.353	-.0013	.9635	.0045	-.0241	-.0113	.1322

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2826.2	6785.0	55345.	5653.0
Stddev	5.5	2.1	133.	55.6
%RSD	.19431	.03032	.23995	.98395
#1	2821.4	6783.8	55277.	5588.8
#2	2832.2	6787.3	55498.	5683.8
#3	2825.0	6783.8	55260.	5686.4

Zoom In Zoom Out

Sample Name: MP30343-S1 Acquired: 5/12/2016 9:48:07 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 20.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0451	27.27	2.028	2.128	.0450	149.9	.0504	.5231	.2049	.2507
Stddev	.0041	.20	.013	.007	.0004	.8	.0007	.0018	.0016	.0027
%RSD	8.985	.7453	.6447	.3348	.8793	.5268	1.360	.3421	.7974	1.074
#1	.0465	27.47	2.013	2.130	.0447	150.1	.0499	.5213	.2040	.2536
#2	.0483	27.28	2.032	2.133	.0455	150.6	.0502	.5231	.2040	.2505
#3	.0405	27.06	2.039	2.120	.0449	149.0	.0512	.5248	.2068	.2482

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	26.76	56.47	121.6	.6058	.4808	995.8	.5289	.4956	.5096	2.066
Stddev	.16	.23	.6	.0012	.0012	3.5	.0038	.0071	.0071	.023
%RSD	.5814	.4092	.4679	.2040	.2523	.3483	.7208	1.436	1.398	1.101
#1	26.91	56.30	121.6	.6064	.4807	997.7	.5296	.5008	.5104	2.050
#2	26.60	56.37	121.0	.6044	.4821	998.0	.5248	.4986	.5162	2.057
#3	26.77	56.73	122.2	.6067	.4797	991.8	.5323	.4875	.5021	2.092

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	2.360	.5077	1.448	.5146	2.055	.4856	.7158
Stddev	.006	.0066	.004	.0007	.013	.0066	.0002
%RSD	.2592	1.301	.2550	.1359	.6183	1.350	.0305
#1	2.359	.5002	1.451	.5154	2.050	.4841	.7156
#2	2.354	.5102	1.449	.5143	2.046	.4928	.7157
#3	2.366	.5127	1.444	.5141	2.070	.4800	.7160

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2855.0	6890.8	55946.	5759.7
Stddev	10.8	20.9	328.	50.6
%RSD	.37655	.30276	.58643	.87850
#1	2866.9	6905.7	55817.	5701.3
#2	2852.0	6899.7	56319.	5791.0
#3	2846.0	6867.0	55702.	5786.8

Zoom In Zoom Out

Sample Name: MP30343-S2 Acquired: 5/12/2016 9:52:09 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 20.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0420	28.16	2.088	2.176	.0450	154.0	.0510	.5409	.2111	.2550
Stddev	.0065	.15	.017	.007	.0008	.3	.0005	.0009	.0024	.0028
%RSD	15.41	.5161	.8170	.3298	1.779	.2065	1.072	.1634	1.128	1.113
#1	.0365	28.32	2.078	2.173	.0456	153.8	.0504	.5403	.2123	.2521
#2	.0405	28.06	2.077	2.172	.0454	153.9	.0514	.5406	.2084	.2550
#3	.0492	28.08	2.107	2.185	.0441	154.4	.0512	.5419	.2126	.2578

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	27.72	57.54	124.3	.6184	.4929	1018.	.5420	.4921	.5214	2.135
Stddev	.18	.32	.1	.0012	.0022	2.	.0029	.0012	.0118	.024
%RSD	.6591	.5520	.0947	.1985	.4448	.2206	.5348	.2460	2.257	1.110
#1	27.82	57.24	124.5	.6197	.4926	1017.	.5454	.4930	.5115	2.117
#2	27.51	57.50	124.2	.6184	.4909	1016.	.5404	.4925	.5183	2.162
#3	27.83	57.87	124.3	.6172	.4953	1020.	.5402	.4907	.5344	2.127

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	2.410	.5314	1.478	.5247	2.093	.4947	.7559
Stddev	.010	.0041	.002	.0022	.011	.0042	.0003
%RSD	.4029	.7794	.1653	.4112	.5171	.8400	.0453
#1	2.399	.5344	1.481	.5264	2.097	.4990	.7561
#2	2.418	.5267	1.477	.5222	2.081	.4943	.7555
#3	2.412	.5332	1.477	.5254	2.102	.4907	.7561

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2816.0	6770.0	55617.	5732.8
Stddev	6.1	12.6	280.	53.6
%RSD	.21494	.18580	.50278	.93463
#1	2821.9	6784.3	55921.	5792.3
#2	2809.8	6765.1	55557.	5688.3
#3	2816.4	6760.6	55372.	5717.8

SGS ACCUTEST FA33720

Zoom In Zoom Out

Sample Name: MP30343-PS1 Acquired: 5/12/2016 9:56:13 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 20.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0469	3.105	.1450	.3418	.0544	133.0	.0609	.0627	.0606	.1072
Stddev	.0073	.070	.0104	.0028	.0027	.6	.0006	.0008	.0049	.0069
%RSD	15.49	2.238	7.138	.8139	4.872	.4249	.9144	1.343	8.141	6.455
#1	.0404	3.034	.1411	.3389	.0535	132.5	.0612	.0617	.0640	.1038
#2	.0455	3.172	.1372	.3423	.0574	133.6	.0603	.0631	.0628	.1027
#3	.0547	3.109	.1567	.3444	.0523	132.9	.0612	.0632	.0549	.1152

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	3.459	43.16	103.8	.1271	.1034	1005.	.1208	.0651	.1228	.1081
Stddev	.017	.67	.3	.0005	.0022	3.	.0046	.0028	.0058	.0200
%RSD	.4993	1.563	.2581	.4035	2.091	.2836	3.785	4.265	4.715	18.53
#1	3.463	42.38	103.5	.1277	.1015	1002.	.1161	.0642	.1265	.1262
#2	3.474	43.58	104.0	.1268	.1058	1007.	.1213	.0682	.1258	.0866
#3	3.440	43.51	103.9	.1268	.1030	1005.	.1252	.0628	.1161	.1116

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.411	.0540	1.022	.1245	.1135	.0585	.4563
Stddev	.005	.0032	.004	.0015	.0169	.0016	.0008
%RSD	.2040	5.900	.3787	1.220	14.92	2.723	.1750
#1	2.407	.0509	1.020	.1262	.1238	.0598	.4561
#2	2.409	.0572	1.020	.1237	.1227	.0589	.4556
#3	2.416	.0539	1.027	.1235	.0939	.0567	.4572

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2825.3	6768.8	55044.	5737.2
Stddev	5.7	16.1	115.	28.5
%RSD	.20314	.23784	.20945	.49613
#1	2831.6	6771.8	55034.	5770.1
#2	2824.0	6783.3	54933.	5720.5
#3	2820.3	6751.5	55163.	5721.1

Zoom In Zoom Out

Sample Name: MP30343-SD1 Acquired: 5/12/2016 10:00:19 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 100.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0600	-.3812	.0577	.0065	-.0489	131.4	-.0154	-.0144	.0006	-.0988
Stddev	.0259	.3670	.0354	.0056	.0050	.6	.0049	.0052	.0270	.0397
%RSD	43.22	96.28	61.30	86.34	10.17	.4772	31.53	36.21	4175.	40.21
#1	-.0737	.0044	.0253	.0075	-.0436	132.0	-.0101	-.0110	.0291	-.1435
#2	-.0301	-.4216	.0524	.0004	-.0496	130.7	-.0196	-.0205	-.0025	-.0676
#3	-.0762	-.7262	.0954	.0115	-.0535	131.6	-.0165	-.0119	-.0247	-.0852

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	-1.209	27.84	100.4	.0413	-.0745	1039.	-.0235	.0311	-.0582	-.0842
Stddev	.258	3.04	2.1	.0031	.0056	1.	.0195	.0181	.0945	.0399
%RSD	21.32	10.94	2.105	7.619	7.481	.1055	82.90	58.08	162.4	47.37
#1	-1.007	30.43	99.70	.0377	-.0779	1039.	-.0256	.0279	-.1491	-.1055
#2	-1.499	28.59	102.8	.0432	-.0681	1039.	-.0031	.0505	-.0651	-.1089
#3	-1.121	24.49	98.79	.0430	-.0775	1038.	-.0419	.0148	.0396	-.0382

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.525	-.0266	.9615	-.0339	-.0317	-.0314	.5970
Stddev	.037	.0253	.0052	.0105	.0462	.0338	.0081
%RSD	1.460	94.88	.5401	30.86	145.7	107.3	1.353
#1	2.501	.0008	.9661	-.0221	-.0083	-.0113	.6063
#2	2.507	-.0317	.9625	-.0421	-.0849	-.0126	.5934
#3	2.568	-.0490	.9559	-.0376	-.0018	-.0704	.5914

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2986.3	6856.8	56992.	5738.0
Stddev	4.5	12.4	468.	35.4
%RSD	.15065	.18153	.82068	.61748
#1	2986.1	6864.6	56864.	5702.7
#2	2990.8	6863.3	57510.	5737.8
#3	2981.8	6842.4	56601.	5773.6

Zoom In Zoom Out

Sample Name: FA33676-2 Acquired: 5/12/2016 10:04:25 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.0044	.0004	.0074	-.0009	14.71	-.0002	-.0001	.0000	-.0012
Stddev	.0005	.0023	.0019	.0002	.0002	.04	.0000	.0000	.0005	.0004
%RSD	3682.	51.26	530.8	2.895	17.59	.2465	28.26	23.98	3135.	34.68
#1	-.0003	.0050	-.0014	.0076	-.0008	14.69	-.0002	-.0001	.0003	-.0015
#2	-.0001	.0064	.0023	.0072	-.0011	14.75	-.0002	-.0002	-.0006	-.0014
#3	.0005	.0019	.0002	.0075	-.0009	14.68	-.0001	-.0002	.0003	-.0007

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	1.266	4.389	4.848	.0293	-.0015	95.37	-.0004	-.0008	-.0012	-.0003
Stddev	.009	.030	.062	.0001	.0001	.32	.0002	.0006	.0016	.0014
%RSD	.7354	.6789	1.276	.2117	6.994	.3321	46.44	70.71	131.0	404.7
#1	1.276	4.362	4.787	.0294	-.0014	95.15	-.0004	-.0002	-.0011	-.0019
#2	1.265	4.421	4.910	.0293	-.0015	95.73	-.0003	-.0013	-.0029	.0005
#3	1.257	4.384	4.847	.0293	-.0016	95.23	-.0006	-.0009	.0003	.0004

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.814	-.0008	.1023	.0001	-.0016	-.0003	.0252
Stddev	.005	.0005	.0004	.0001	.0015	.0002	.0001
%RSD	.1210	63.88	.3444	106.0	89.67	47.32	.3132
#1	3.811	-.0005	.1020	.0002	-.0001	-.0002	.0253
#2	3.812	-.0015	.1027	.0000	-.0030	-.0005	.0252
#3	3.820	-.0006	.1021	.0002	-.0017	-.0003	.0251

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2853.9	6772.1	55883.	5747.1
Stddev	4.3	12.7	416.	39.1
%RSD	.15125	.18816	.74369	.68036
#1	2857.3	6778.9	55477.	5766.0
#2	2849.0	6757.4	55865.	5702.1
#3	2855.3	6779.9	56307.	5773.1

Zoom In Zoom Out

Sample Name: FA33676-6 Acquired: 5/12/2016 10:12:35 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0003	-.0066	.0006	.0439	-.0009	83.04	-.0003	-.0004	.0000	.0000
Stddev	.0002	.0317	.0008	.0002	.0001	.09	.0000	.0002	.000	.0004
%RSD	55.24	483.5	139.3	.4047	5.893	.1087	7.367	38.31	6011.	1412.
#1	-.0005	-.0202	.0009	.0437	-.0009	83.10	-.0003	-.0003	.0002	-.0004
#2	-.0002	.0297	.0011	.0441	-.0009	82.94	-.0003	-.0006	-.0005	.0005
#3	-.0003	-.0291	-.0003	.0438	-.0010	83.08	-.0003	-.0005	.0002	.0000

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	2.691	3.553	5.090	.0415	-.0021	111.1	-.0004	-.0011	-.0004	.0007
Stddev	.022	.013	.085	.0002	.0002	.1	.0001	.0004	.0014	.0018
%RSD	.8126	.3692	1.664	.5088	7.758	.1124	32.57	36.81	320.4	247.3
#1	2.690	3.542	4.992	.0413	-.0022	111.3	-.0004	-.0015	.0010	-.0010
#2	2.714	3.548	5.143	.0417	-.0020	111.1	-.0006	-.0007	-.0018	.0006
#3	2.670	3.568	5.134	.0415	-.0019	111.1	-.0003	-.0010	-.0005	.0026

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	4.422	-.0007	.5934	.0017	-.0002	-.0006	.0340
Stddev	.004	.0002	.0010	.0001	.0003	.0003	.0002
%RSD	.0786	31.83	.1686	5.802	122.7	57.18	.5274
#1	4.425	-.0009	.5923	.0018	.0001	-.0002	.0340
#2	4.418	-.0005	.5941	.0016	-.0005	-.0006	.0338
#3	4.423	-.0006	.5939	.0017	-.0003	-.0009	.0341

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2812.2	6774.4	55490.	5859.3
Stddev	5.1	8.2	208.	17.7
%RSD	.18265	.12037	.37551	.30136
#1	2813.6	6770.5	55729.	5861.7
#2	2816.5	6783.8	55397.	5875.7
#3	2806.6	6768.9	55344.	5840.6

Zoom In Zoom Out

Sample Name: FA33752-4 Acquired: 5/12/2016 10:16:40 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0032	.9226	.8377	.0416	-.0054	16.28	-.0023	.1487	.2677
Stddev	.0023	.0739	.0026	.0022	.0004	.09	.0005	.0004	.0015
%RSD	70.87	8.014	.3142	5.386	6.633	.5477	22.85	.2722	.5426
#1	-.0006	.9990	.8349	.0419	-.0058	16.20	-.0029	.1483	.2661
#2	-.0050	.8514	.8402	.0436	-.0052	16.25	-.0019	.1490	.2685
#3	-.0040	.9173	.8379	.0392	-.0051	16.38	-.0021	.1489	.2687

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.3419	2.969	F6961.	.2348	.3469	14.38	F9305.	1.473	-.0220
Stddev	.0014	.034	124.	.1876	.0012	.03	381.	.003	.0046
%RSD	.4094	1.146	1.778	79.88	.3490	.1869	4.094	.2234	20.70
#1	.3429	3.006	7083.	.4043	.3459	14.36	9549.	1.473	-.0210
#2	.3425	2.960	6962.	.0333	.3483	14.37	9500.	1.469	-.0270
#3	.3403	2.940	6836.	.2670	.3467	14.41	8866.	1.476	-.0180

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0817	1.224	16.95	.0147	2.421	.0097	-.0305	.5522	.1012
Stddev	.0102	.015	.05	.0019	.004	.0005	.0123	.0051	.0002
%RSD	12.48	1.223	.2906	12.72	.1569	4.993	40.25	.9319	.1755
#1	.0843	1.216	16.91	.0133	2.418	.0103	-.0256	.5574	.1010
#2	.0704	1.216	16.93	.0168	2.421	.0096	-.0445	.5520	.1013
#3	.0903	1.242	17.00	.0140	2.425	.0093	-.0215	.5471	.1014

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1943.1	5404.1	42410.	5415.6
Stddev	1.4	10.3	96.	49.2
%RSD	.07260	.19088	.22548	.90885
#1	1943.9	5405.1	42518.	5449.8
#2	1943.9	5413.9	42377.	5359.2
#3	1941.5	5393.3	42335.	5437.7

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/12/2016 10:21:01 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2510	40.35	1.994	2.019	2.026	40.37	2.032	2.020	2.006	2.018
Stddev	.0004	.21	.003	.008	.009	.21	.002	.000	.009	.002
%RSD	.1603	.5291	.1706	.3983	.4434	.5114	.0885	.0176	.4450	.1188
#1	.2511	40.29	1.992	2.019	2.027	40.34	2.032	2.020	2.014	2.021
#2	.2513	40.16	1.992	2.011	2.017	40.18	2.030	2.020	2.007	2.017
#3	.2505	40.58	1.998	2.027	2.034	40.59	2.034	2.021	1.996	2.016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.65	40.20	40.43	2.057	2.037	37.02	2.014	1.991	2.000	1.995
Stddev	.16	.17	.17	.004	.004	.36	.003	.004	.001	.002
%RSD	.3894	.4213	.4174	.1916	.2194	.9821	.1563	.1918	.0613	.1060
#1	41.70	40.25	40.45	2.062	2.033	36.71	2.012	1.993	2.001	1.994
#2	41.47	40.02	40.25	2.055	2.037	36.93	2.014	1.987	1.999	1.994
#3	41.79	40.35	40.59	2.055	2.042	37.42	2.018	1.994	1.999	1.998
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.779	2.045	2.072	2.081	2.012	2.039	2.026
Stddev	.002	.005	.008	.001	.003	.006	.002
%RSD	.1191	.2291	.3988	.0574	.1561	.2745	.1054
#1	1.781	2.042	2.075	2.081	2.013	2.043	2.025
#2	1.778	2.042	2.063	2.080	2.008	2.040	2.024
#3	1.777	2.050	2.079	2.082	2.014	2.032	2.028
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/12/2016 10:21:01 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2581.7	6551.8	54093.	5716.9
Stddev	10.7	26.2	239.	40.1
%RSD	.41499	.39988	.44241	.70058
#1	2587.0	6565.2	53840.	5693.1
#2	2588.8	6568.5	54123.	5763.1
#3	2569.4	6521.6	54315.	5694.4

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/12/2016 10:24:56 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0200	F.0020	.0000	.0001	.0000	.0001	.0000	.0003
Stddev	.0001	.0088	.0001	.0002	.0001	.003	.0000	.0001	.0001
%RSD	48.38	44.26	6.351	381.7	163.5	12700.	49.52	424.8	36.67
#1	-.0004	.0284	.0020	.0002	.0001	.0012	.0001	.0000	.0002
#2	-.0002	.0208	.0020	.0000	.0001	.0022	.0001	.0001	.0004
#3	-.0002	.0107	.0022	-.0001	-.0001	-.0034	.0000	-.0001	.0004
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.0020						
Low Limit			-.0020						

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0007	.0179	.0870	-.0034	.0001	F.0019	.2619	.0000	-.0007
Stddev	.0003	.0044	.0089	.0095	.0001	.0007	.0150	.0001	.0004
%RSD	35.43	24.64	10.21	279.3	76.66	35.44	5.719	668.7	61.89
#1	-.0008	.0216	.0890	-.0067	.0001	.0026	.2752	-.0001	-.0002
#2	-.0005	.0190	.0947	.0073	.0001	.0018	.2649	.0002	-.0010
#3	-.0010	.0130	.0773	-.0107	.0000	.0013	.2457	-.0001	-.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F.0024	-.0010	.0060	.0003	.0001	.0012	.0005	-.0002	-.0010
Stddev	.0008	.0001	.0005	.0001	.0001	.0002	.0008	.0002	.0001
%RSD	34.75	10.96	9.012	21.95	83.11	13.65	155.6	106.0	7.780
#1	.0033	-.0011	.0066	.0002	.0002	.0014	-.0004	.0000	-.0009
#2	.0017	-.0011	.0056	.0004	.0001	.0013	.0010	-.0002	-.0010
#3	.0021	-.0009	.0057	.0003	.0000	.0011	.0009	-.0004	-.0011
Check ?	Chk Fail	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.0020								
Low Limit	-.0020								

SGS ACCUTEST FA33720

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/12/2016 10:24:56 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3084.3	6964.0	57991.	5881.0
Stddev	14.4	20.8	74.	37.6
%RSD	.46593	.29827	.12685	.63962
#1	3096.0	6983.9	57970.	5908.3
#2	3088.7	6965.6	57930.	5838.1
#3	3068.3	6942.4	58073.	5896.7

Zoom In Zoom Out

Sample Name: FA33752-5 Acquired: 5/12/2016 10:30:19 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0019	1.112	.3890	.0843	-.0047	559.0	-.0035	.0918	.0326
Stddev	.0013	.150	.0074	.0009	.0005	1.9	.0004	.0010	.0028
%RSD	68.53	13.49	1.891	1.016	10.48	.3466	11.16	1.051	8.587
#1	-.0029	1.143	.3810	.0844	-.0042	557.8	-.0032	.0920	.0341
#2	-.0004	1.243	.3954	.0852	-.0046	561.3	-.0033	.0927	.0344
#3	-.0023	.9485	.3906	.0834	-.0052	558.1	-.0039	.0908	.0294

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0593	.9684	F6085.	-.0109	.0016	21.65	F7842.	1.005	-.0129
Stddev	.0016	.0069	150.	.0991	.0004	.08	277.	.004	.0075
%RSD	2.729	.7146	2.465	906.5	28.14	.3785	3.532	.4369	57.76
#1	.0581	.9759	6213.	-.0865	.0018	21.56	8155.	.9996	-.0149
#2	.0611	.9671	6121.	.1013	.0019	21.67	7628.	1.007	-.0047
#3	.0587	.9622	5920.	-.0476	.0011	21.71	7744.	1.007	-.0192

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0949	.1527	20.24	-.0026	12.71	.0109	-.0187	.1144	.1168
Stddev	.0022	.0071	.09	.0013	.05	.0014	.0062	.0019	.0009
%RSD	2.317	4.647	.4536	49.28	.3878	13.17	33.35	1.636	.7603
#1	.0930	.1451	20.14	-.0019	12.66	.0115	-.0162	.1165	.1173
#2	.0973	.1539	20.27	-.0018	12.76	.0093	-.0258	.1139	.1174
#3	.0945	.1592	20.31	-.0040	12.71	.0119	-.0140	.1129	.1158

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2015.1	5628.6	44660.	5544.7
Stddev	3.0	6.7	100.	26.9
%RSD	.14883	.11822	.22309	.48545
#1	2012.9	5633.4	44576.	5546.5
#2	2018.5	5631.4	44770.	5516.9
#3	2014.0	5621.0	44633.	5570.6

Zoom In Zoom Out

Sample Name: FA33752-6 Acquired: 5/12/2016 10:34:41 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0012	.4863	.4293	.0513	-.0060	410.0	-.0031	.0423	.1154
Stddev	.0030	.1006	.0028	.0026	.0004	1.2	.0003	.0007	.0021
%RSD	247.3	20.70	.6484	5.024	7.288	.2806	9.171	1.585	1.794
#1	-.0044	.4080	.4320	.0541	-.0064	409.0	-.0033	.0429	.1170
#2	.0014	.4510	.4294	.0491	-.0055	409.7	-.0028	.0416	.1131
#3	-.0006	.5998	.4264	.0506	-.0062	411.3	-.0032	.0424	.1161

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.1870	.2743	F4393.	.0207	.0251	20.21	F7408.	.5232	-.0157
Stddev	.0034	.0122	30.	.2322	.0004	.05	89.	.0023	.0107
%RSD	1.798	4.444	.6890	1123.	1.553	.2366	1.204	.4313	67.77
#1	.1849	.2613	4379.	-.2181	.0256	20.16	7409.	.5255	-.0105
#2	.1852	.2855	4373.	.0345	.0249	20.25	7318.	.5210	-.0087
#3	.1909	.2760	4428.	.2458	.0249	20.22	7496.	.5229	-.0280

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0868	.1421	19.15	.0014	7.673	.0150	-.0184	.2769	.1126
Stddev	.0132	.0134	.04	.0008	.014	.0005	.0084	.0038	.0005
%RSD	15.20	9.420	.1855	54.00	.1835	3.116	45.69	1.374	.4061
#1	.0849	.1575	19.12	.0022	7.659	.0152	-.0220	.2803	.1126
#2	.0747	.1347	19.19	.0007	7.674	.0154	-.0088	.2728	.1130
#3	.1009	.1341	19.14	.0014	7.687	.0145	-.0244	.2775	.1121

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2007.9	5519.6	44232.	5517.9
Stddev	3.8	12.1	137.	41.3
%RSD	.18935	.21988	.31070	.74894
#1	2012.3	5533.5	44077.	5565.4
#2	2006.4	5510.9	44341.	5498.0
#3	2005.2	5514.4	44277.	5490.2

Zoom In Zoom Out

Sample Name: FA33752-7 Acquired: 5/12/2016 10:39:00 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0063	1.023	.9847	.0522	-.0047	25.46	-.0029	.0516	.7923
Stddev	.0009	.040	.0055	.0015	.0008	.12	.0006	.0004	.0043
%RSD	13.90	3.884	.5624	2.955	17.67	.4769	21.75	.8168	.5450
#1	.0067	1.022	.9875	.0504	-.0046	25.43	-.0029	.0515	.7886
#2	.0069	.9834	.9784	.0531	-.0039	25.35	-.0035	.0513	.7970
#3	.0053	1.063	.9883	.0530	-.0056	25.59	-.0023	.0521	.7912

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0127	2.942	F4478.	.1773	4.199	21.82	F7829.	1.044	-.0263
Stddev	.0028	.029	28.	.0867	.018	.17	186.	.007	.0046
%RSD	22.20	.9862	.6340	48.88	.4268	.7930	2.377	.6576	17.43
#1	.0141	2.916	4493.	.0773	4.219	21.64	7949.	1.038	-.0210
#2	.0145	2.939	4495.	.2252	4.194	21.83	7923.	1.043	-.0291
#3	.0094	2.973	4445.	.2295	4.184	21.98	7615.	1.051	-.0287

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.1107	.1774	7.726	.0040	1.529	.0791	-.0448	1.118	.0728
Stddev	.0100	.0021	.062	.0031	.011	.0019	.0097	.008	.0012
%RSD	9.052	1.159	.8071	77.20	.7005	2.428	21.62	.7285	1.675
#1	.1200	.1782	7.667	.0009	1.518	.0788	-.0537	1.125	.0716
#2	.1001	.1789	7.720	.0040	1.529	.0811	-.0461	1.121	.0728
#3	.1120	.1750	7.792	.0071	1.539	.0773	-.0345	1.109	.0740

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1924.9	5359.5	42672.	5579.0
Stddev	13.7	39.5	195.	21.7
%RSD	.71227	.73611	.45808	.38843
#1	1939.2	5400.0	42468.	5595.7
#2	1923.6	5357.3	42688.	5554.5
#3	1911.9	5321.2	42858.	5586.7

Zoom In Zoom Out

Sample Name: FA33752-9 Acquired: 5/12/2016 10:43:21 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0004	.4492	.3886	.1901	-.0057	61.81	-.0031	.0839	.6231
Stddev	.0045	.0808	.0031	.0017	.0003	.27	.0003	.0016	.0064
%RSD	1243.	17.99	.7912	.8711	5.891	.4440	8.919	1.854	1.025
#1	-.0043	.4628	.3854	.1896	-.0060	62.08	-.0033	.0856	.6304
#2	.0007	.5224	.3915	.1888	-.0054	61.80	-.0028	.0825	.6202
#3	.0046	.3624	.3889	.1920	-.0058	61.53	-.0032	.0836	.6187

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0110	4.205	F6403.	2.738	1.578	16.91	F7000.	1.658	-.0250
Stddev	.0025	.067	166.	.049	.005	.03	144.	.001	.0055
%RSD	23.00	1.598	2.586	1.793	.3285	.1501	2.051	.0588	22.17
#1	.0116	4.276	6594.	2.779	1.575	16.89	7153.	1.658	-.0227
#2	.0083	4.142	6302.	2.684	1.574	16.90	6868.	1.657	-.0209
#3	.0132	4.197	6313.	2.750	1.584	16.94	6978.	1.659	-.0313

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0867	1.126	19.14	.0158	4.165	.2422	-.0384	.7534	.0916
Stddev	.0075	.022	.03	.0009	.009	.0013	.0118	.0035	.0004
%RSD	8.652	1.978	.1392	5.617	.2076	.5164	30.86	.4602	.4013
#1	.0880	1.104	19.12	.0164	4.175	.2424	-.0485	.7507	.0921
#2	.0786	1.124	19.14	.0148	4.161	.2409	-.0412	.7522	.0914
#3	.0934	1.149	19.17	.0162	4.159	.2434	-.0253	.7573	.0914

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2003.5	5491.3	43640.	5498.9
Stddev	3.7	4.4	146.	36.4
%RSD	.18460	.08097	.33404	.66105
#1	2003.0	5495.2	43542.	5463.5
#2	2007.4	5492.1	43808.	5536.1
#3	2000.0	5486.5	43571.	5497.1

Zoom In Zoom Out

Sample Name: FA33784-4 Acquired: 5/12/2016 10:47:42 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 4.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0015	44.74	.1841	.1369	.0018	1299.	.0048	.0094	.1429	.4396
Stddev	.0011	.09	.0021	.0006	.0001	4.	.0002	.0002	.0009	.0004
%RSD	78.25	.1924	1.154	.4499	4.006	.3039	4.560	1.755	.5976	.0942
#1	-.0020	44.82	.1816	.1374	.0018	1301.	.0046	.0093	.1438	.4398
#2	-.0022	44.74	.1853	.1362	.0018	1302.	.0050	.0092	.1421	.4398
#3	-.0001	44.65	.1853	.1371	.0019	1294.	.0048	.0096	.1426	.4391

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	52.20	9.120	14.50	.4793	.0090	14.13	.0299	.2192	.0117	-.0016
Stddev	.07	.238	.09	.0009	.0015	.35	.0005	.0019	.0016	.0029
%RSD	.1284	2.607	.6294	.1940	17.05	2.488	1.577	.8604	14.09	179.3
#1	52.16	9.310	14.59	.4783	.0106	14.47	.0296	.2197	.0128	-.0047
#2	52.15	9.198	14.50	.4801	.0089	14.15	.0296	.2208	.0098	.0011
#3	52.27	8.854	14.40	.4793	.0075	13.77	.0305	.2171	.0125	-.0013

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.489	.0197	5.272	.5060	-.0068	.0934	.4570
Stddev	.003	.0004	.012	.0010	.0015	.0009	.0010
%RSD	.0515	2.135	.2301	.2029	21.78	.9831	.2205
#1	5.492	.0194	5.286	.5070	-.0068	.0937	.4569
#2	5.489	.0202	5.264	.5050	-.0053	.0941	.4560
#3	5.487	.0196	5.267	.5059	-.0082	.0923	.4581

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2589.9	6902.2	56705.	6043.8
Stddev	3.1	13.3	108.	50.1
%RSD	.12147	.19269	.19012	.82879
#1	2590.3	6909.7	56668.	6100.4
#2	2592.8	6910.0	56620.	6005.2
#3	2586.6	6886.8	56826.	6025.8

Zoom In Zoom Out

Sample Name: MP30344-D1 Acquired: 5/12/2016 10:51:54 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 4.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0010	55.62	.1974	.1409	.0018	1031.	.0024	.0108	.1709	.5309
Stddev	.0011	.22	.0013	.0004	.0001	13.	.0002	.0001	.0017	.0018
%RSD	103.6	.3986	.6390	.2897	7.039	1.279	7.171	1.265	.9773	.3334
#1	-.0020	55.41	.1978	.1407	.0017	1035.	.0026	.0107	.1691	.5289
#2	.0001	55.85	.1960	.1406	.0017	1017.	.0023	.0110	.1724	.5320
#3	-.0013	55.58	.1985	.1413	.0019	1042.	.0024	.0108	.1712	.5318

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	58.03	7.667	12.40	.3846	.0029	12.36	.0340	.2599	-.0005	.0007
Stddev	.22	.060	.07	.0002	.0002	.09	.0001	.0039	.0022	.0028
%RSD	.3773	.7827	.5812	.0550	5.162	.7556	.1645	1.491	468.7	396.5
#1	57.79	7.688	12.34	.3844	.0030	12.46	.0339	.2583	-.0006	-.0021
#2	58.08	7.714	12.37	.3848	.0028	12.35	.0339	.2643	-.0026	.0007
#3	58.22	7.600	12.48	.3848	.0030	12.27	.0340	.2570	.0018	.0035

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.432	.0207	4.691	.6620	-.0021	.1074	.5178
Stddev	.012	.0011	.021	.0014	.0011	.0016	.0005
%RSD	.2113	5.215	.4459	.2066	53.03	1.533	.0964
#1	5.437	.0207	4.688	.6633	-.0033	.1055	.5181
#2	5.419	.0218	4.713	.6621	-.0020	.1082	.5182
#3	5.440	.0196	4.671	.6606	-.0010	.1085	.5173

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2646.6	7028.1	58115.	6158.2
Stddev	6.0	8.5	185.	33.3
%RSD	.22622	.12039	.31857	.54146
#1	2651.2	7037.9	58312.	6169.4
#2	2639.8	7023.8	58087.	6184.6
#3	2648.8	7022.7	57945.	6120.8

Zoom In Zoom Out

Sample Name: MP30344-S1 Acquired: 5/12/2016 10:56:07 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 4.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0474	87.81	2.174	2.180	.0525	1234.	.0561	.4964	.3698	.7525
Stddev	.0011	.56	.004	.007	.0004	44.	.0003	.0006	.0018	.0005
%RSD	2.275	.6373	.1936	.3258	.7286	3.587	.5339	.1206	.4953	.0603
#1	.0471	87.19	2.175	2.175	.0521	1189.	.0560	.4968	.3677	.7528
#2	.0464	88.27	2.169	2.188	.0529	1236.	.0558	.4966	.3704	.7526
#3	.0486	87.98	2.177	2.177	.0526	1277.	.0564	.4957	.3713	.7519

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	84.72	32.16	35.98	.9113	.4520	38.07	.5304	.7571	.1504	1.993
Stddev	.35	.23	.38	.0009	.0007	.27	.0011	.0017	.0017	.007
%RSD	.4153	.7278	1.062	.1019	.1456	.7166	.1981	.2307	1.153	.3733
#1	84.31	31.97	35.54	.9110	.4526	37.79	.5295	.7591	.1489	2.001
#2	84.95	32.42	36.22	.9105	.4522	38.33	.5316	.7562	.1499	1.987
#3	84.90	32.10	36.18	.9123	.4513	38.08	.5301	.7559	.1523	1.991

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.458	.5003	5.675	1.063	2.043	.5834	1.012
Stddev	.011	.0025	.010	.002	.003	.0002	.001
%RSD	.1967	.4937	.1709	.1612	.1479	.0269	.1189
#1	5.447	.4975	5.668	1.064	2.040	.5832	1.013
#2	5.460	.5021	5.686	1.061	2.043	.5835	1.012
#3	5.468	.5014	5.670	1.062	2.046	.5833	1.010

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2572.2	6885.5	57338.	6125.9
Stddev	3.4	11.5	136.	119.3
%RSD	.13078	.16662	.23657	1.9467
#1	2568.4	6879.7	57473.	6244.5
#2	2574.9	6898.7	57340.	6127.1
#3	2573.4	6878.1	57201.	6006.0

SGS ACCUTEST FA33720

Zoom In Zoom Out

Sample Name: MP30344-S2 Acquired: 5/12/2016 11:00:13 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 4.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0467	89.86	2.211	2.202	.0525	1100.	.0514	.4997	.3605	.7088
Stddev	.0013	.19	.005	.006	.0006	4.	.0001	.0014	.0007	.0009
%RSD	2.691	.2065	.2203	.2782	1.231	.3258	.2891	.2863	.2079	.1226
#1	.0470	89.92	2.217	2.200	.0520	1104.	.0515	.5000	.3609	.7085
#2	.0478	90.00	2.209	2.196	.0524	1098.	.0515	.5009	.3596	.7097
#3	.0453	89.65	2.207	2.208	.0533	1098.	.0512	.4981	.3609	.7081

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	84.72	31.95	37.18	.8863	.4564	37.31	.5337	.7224	.1512	2.003
Stddev	.29	.13	.08	.0018	.0008	.05	.0005	.0013	.0018	.008
%RSD	.3457	.3925	.2091	.2006	.1733	.1253	.0994	.1753	1.177	.3830
#1	84.79	32.04	37.17	.8848	.4565	37.35	.5342	.7231	.1514	1.995
#2	84.40	31.80	37.26	.8882	.4571	37.26	.5331	.7209	.1529	2.007
#3	84.97	32.01	37.11	.8859	.4556	37.33	.5338	.7231	.1494	2.009

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	4.624	.5129	4.978	1.072	2.043	.5868	.9429
Stddev	.008	.0018	.002	.002	.006	.0020	.0012
%RSD	.1644	.3568	.0477	.2115	.2897	.3468	.1306
#1	4.631	.5112	4.976	1.073	2.049	.5850	.9436
#2	4.625	.5127	4.978	1.073	2.041	.5890	.9414
#3	4.616	.5148	4.981	1.069	2.038	.5864	.9436

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2634.6	7002.5	58683.	6189.7
Stddev	4.1	6.4	347.	39.3
%RSD	.15733	.09104	.59206	.63509
#1	2639.3	7005.6	59045.	6202.1
#2	2632.9	7006.7	58353.	6221.4
#3	2631.6	6995.2	58652.	6145.7

Zoom In Zoom Out

Sample Name: MP30344-PS1 Acquired: 5/12/2016 11:04:20 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 4.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0436	46.72	.2855	.3849	.0492	1275.	.0542	.0586	.1933	.5343
Stddev	.0017	2.50	.0028	.0210	.0028	51.	.0003	.0006	.0010	.0036
%RSD	3.898	5.359	.9849	5.457	5.697	3.983	.5113	1.075	.4977	.6688
#1	.0439	43.83	.2887	.3607	.0460	1223.	.0544	.0590	.1926	.5331
#2	.0417	48.02	.2832	.3978	.0511	1277.	.0544	.0579	.1930	.5315
#3	.0451	48.31	.2847	.3963	.0506	1324.	.0539	.0589	.1944	.5383

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	52.42	15.31	18.68	.5194	.0951	20.86	.1275	.2646	.1147	.0969
Stddev	2.79	.73	1.10	.0010	.0006	1.04	.0004	.0027	.0034	.0050
%RSD	5.321	4.784	5.906	.1873	.6337	4.971	.2868	1.005	2.989	5.155
#1	49.20	14.47	17.41	.5187	.0945	19.67	.1271	.2621	.1179	.0928
#2	53.95	15.78	19.37	.5189	.0952	21.41	.1279	.2643	.1151	.1024
#3	54.10	15.69	19.27	.5205	.0957	21.51	.1274	.2674	.1111	.0953

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.564	.0690	5.132	.5914	.0974	.1418	.6971
Stddev	.015	.0004	.268	.0017	.0045	.0009	.0003
%RSD	.2712	.5191	5.212	.2837	4.659	.6413	.0490
#1	5.580	.0691	4.823	.5895	.0963	.1420	.6969
#2	5.551	.0686	5.285	.5926	.1024	.1409	.6969
#3	5.561	.0693	5.287	.5922	.0936	.1427	.6975

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2602.2	6843.7	57670.	6286.1
Stddev	7.4	11.4	254.	288.2
%RSD	.28461	.16721	.43966	4.5842
#1	2610.6	6846.9	57590.	6609.8
#2	2599.1	6853.1	57953.	6190.6
#3	2596.8	6830.9	57466.	6057.7

Zoom In Zoom Out

Sample Name: MP30344-SD1 Acquired: 5/12/2016 11:08:30 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 20.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0080	49.87	.1987	.1417	-.0069	1388.	.0029	.0080	.1513	.4330
Stddev	.0029	.28	.0040	.0028	.0002	5.	.0006	.0007	.0019	.0077
%RSD	36.59	.5620	1.993	1.957	2.305	.3895	21.88	8.384	1.274	1.772
#1	-.0064	50.07	.2026	.1446	-.0071	1394.	.0033	.0073	.1535	.4381
#2	-.0114	49.55	.1986	.1413	-.0068	1383.	.0032	.0087	.1504	.4242
#3	-.0062	49.99	.1947	.1391	-.0068	1386.	.0021	.0081	.1500	.4367

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	54.46	6.746	15.28	.4925	-.0166	14.54	.0311	.2055	-.0108	.0293
Stddev	.36	.383	.28	.0015	.0015	.42	.0042	.0038	.0104	.0097
%RSD	.6523	5.672	1.845	.2994	9.230	2.885	13.42	1.837	96.29	33.27
#1	54.13	6.705	15.54	.4925	-.0182	14.95	.0271	.2098	-.0060	.0343
#2	54.42	6.385	15.32	.4911	-.0151	14.57	.0308	.2028	-.0226	.0354
#3	54.83	7.147	14.98	.4940	-.0165	14.11	.0354	.2038	-.0036	.0180

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	11.11	.0204	5.418	.7014	.0131	.0964	.5437
Stddev	.13	.0018	.015	.0246	.0083	.0037	.0012
%RSD	1.175	8.808	.2738	3.512	63.69	3.840	.2237
#1	11.10	.0216	5.435	.7297	.0035	.1001	.5444
#2	11.25	.0213	5.410	.6898	.0170	.0963	.5445
#3	10.99	.0184	5.409	.6847	.0187	.0927	.5423

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2874.9	6820.4	57496.	5810.0
Stddev	5.9	5.9	193.	41.9
%RSD	.20414	.08624	.33650	.72160
#1	2874.3	6813.8	57694.	5806.3
#2	2881.0	6825.2	57308.	5853.7
#3	2869.3	6822.3	57487.	5770.1

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/12/2016 11:12:35 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2516	40.60	2.005	2.026	2.001	40.43	2.038	2.028	2.016	2.018
Stddev	.0001	.07	.005	.006	.005	.06	.002	.001	.004	.003
%RSD	.0532	.1804	.2697	.2743	.2705	.1454	.0959	.0677	.2170	.1658
#1	.2516	40.54	2.005	2.021	1.996	40.37	2.037	2.027	2.020	2.016
#2	.2517	40.58	2.011	2.025	2.000	40.42	2.041	2.029	2.011	2.016
#3	.2514	40.69	2.000	2.032	2.007	40.49	2.038	2.027	2.017	2.021
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.99	40.36	40.15	2.046	2.046	40.09	2.029	1.995	2.011	2.010
Stddev	.17	.13	.12	.003	.005	.11	.003	.004	.002	.006
%RSD	.4064	.3128	.2882	.1446	.2241	.2784	.1588	.2172	.0853	.2868
#1	40.80	40.22	40.06	2.046	2.041	40.00	2.031	1.990	2.010	2.009
#2	41.07	40.38	40.28	2.043	2.050	40.06	2.032	1.997	2.013	2.017
#3	41.11	40.47	40.12	2.048	2.047	40.21	2.026	1.999	2.010	2.005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.766	2.069	2.060	2.063	2.013	2.040	2.036
Stddev	.002	.004	.007	.004	.004	.003	.001
%RSD	.1156	.1924	.3573	.2187	.1846	.1285	.0654
#1	1.767	2.072	2.056	2.059	2.009	2.041	2.034
#2	1.767	2.071	2.055	2.062	2.014	2.037	2.037
#3	1.763	2.065	2.069	2.068	2.016	2.042	2.035
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

SGS ACCUTEST FA33720

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/12/2016 11:12:35 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2573.2	6507.1	54265.	5725.6
Stddev	3.9	7.4	237.	53.1
%RSD	.15057	.11364	.43650	.92757
#1	2577.4	6504.7	54014.	5761.6
#2	2572.3	6501.2	54485.	5664.6
#3	2569.9	6515.4	54295.	5750.7

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/12/2016 11:16:30 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0092	.0014	.0002	.0000	.0005	.0001	.0001	.0002
Stddev	.0002	.0025	.0008	.0001	.000	.0038	.0001	.0001	.0002
%RSD	78.19	27.63	57.45	39.26	76.28	769.2	87.35	65.09	118.0
#1	.0000	.0074	.0017	.0001	.0000	.0049	.0000	.0001	.0004
#2	-.0003	.0081	.0020	.0001	-.0001	-.0010	.0001	.0002	.0000
#3	-.0003	.0121	.0005	.0002	-.0001	-.0024	.0000	.0001	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0007	.0168	.0398	-.0030	.0000	F.0019	.1287	.0001	.0005
Stddev	.0003	.0046	.0291	.0133	.0001	.0005	.0028	.0001	.0004
%RSD	44.21	27.59	73.22	445.7	145.8	26.73	2.181	112.0	85.95
#1	-.0005	.0208	.0468	-.0025	.0001	.0023	.1282	.0002	.0000
#2	-.0006	.0179	.0648	-.0164	.0000	.0020	.1317	.0001	.0009
#3	-.0011	.0117	.0078	.0101	.0000	.0013	.1262	.0000	.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0010	.0007	.0031	.0003	.0000	.0010	.0004	.0000	-.0010
Stddev	.0007	.0005	.0005	.0001	.0001	.0001	.0008	.000	.0001
%RSD	65.30	67.25	15.64	40.15	226.4	10.71	189.3	7079.	6.364
#1	.0014	.0009	.0034	.0002	.0001	.0011	-.0005	-.0003	-.0010
#2	.0014	.0010	.0034	.0004	-.0001	.0009	.0007	.0003	-.0010
#3	.0003	.0002	.0026	.0002	.0001	.0010	.0010	.0000	-.0011
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/12/2016 11:16:30 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3072.6	6888.5	57525.	5708.4
Stddev	7.2	1.8	307.	51.8
%RSD	.23552	.02546	.53426	.90754
#1	3079.8	6888.6	57861.	5660.3
#2	3065.3	6890.3	57453.	5763.3
#3	3072.8	6886.8	57259.	5701.7

Zoom In Zoom Out

Sample Name: FA33784-2 Acquired: 5/12/2016 11:20:39 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0006	14.01	.0184	.0542	.0006	233.5	.0005	.0040	.0456	.0630
Stddev	.0005	.01	.0006	.0002	.0001	.6	.0000	.0002	.0005	.0004
%RSD	93.99	.0976	3.379	.3491	22.06	.2662	3.188	6.272	1.145	.7074
#1	-.0003	13.99	.0186	.0543	.0007	233.0	.0005	.0041	.0461	.0626
#2	-.0002	14.02	.0177	.0542	.0005	234.2	.0005	.0037	.0455	.0635
#3	-.0012	14.01	.0190	.0540	.0005	233.3	.0005	.0041	.0451	.0629

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	21.57	1.204	4.565	.2046	.0008	2.943	.0086	.0964	.0011	.0004
Stddev	.07	.043	.083	.0003	.0003	.013	.0003	.0010	.0012	.0016
%RSD	.3436	3.589	1.815	.1415	43.22	.4412	3.028	1.065	105.3	460.1
#1	21.49	1.254	4.488	.2048	.0011	2.958	.0085	.0972	.0011	.0021
#2	21.58	1.181	4.652	.2047	.0004	2.934	.0084	.0953	.0023	-.0010
#3	21.64	1.177	4.555	.2043	.0009	2.938	.0089	.0968	-.0001	-.0001

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.265	.0180	1.176	.3579	-.0014	.0315	.1365
Stddev	.004	.0003	.004	.0002	.0006	.0002	.0001
%RSD	.1709	1.558	.3061	.0517	40.01	.6853	.0854
#1	2.265	.0182	1.173	.3581	-.0016	.0316	.1366
#2	2.261	.0177	1.180	.3577	-.0008	.0313	.1364
#3	2.269	.0179	1.176	.3578	-.0018	.0317	.1364

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2765.6	7798.4	63950.	6634.1
Stddev	2.5	3.9	195.	55.6
%RSD	.09092	.04948	.30426	.83835
#1	2765.9	7799.0	63753.	6685.5
#2	2768.0	7801.9	64142.	6575.0
#3	2763.0	7794.3	63956.	6641.7

Zoom In Zoom Out

Sample Name: FA33784-6 Acquired: 5/12/2016 11:24:44 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0009	89.95	.0716	.1267	.0045	190.0	.0014	.0178	.2022	.0934
Stddev	.0002	.37	.0010	.0001	.0002	.8	.0000	.0001	.0004	.0006
%RSD	20.71	.4085	1.356	.0590	4.181	.4094	2.248	.6198	.1895	.6926
#1	.0008	90.16	.0705	.1268	.0046	190.6	.0014	.0179	.2019	.0940
#2	.0009	90.15	.0725	.1267	.0043	190.3	.0014	.0178	.2026	.0927
#3	.0011	89.52	.0717	.1266	.0046	189.1	.0015	.0177	.2021	.0934

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	100.9	7.644	14.30	.2586	.0284	2.491	.0515	.1368	.0004	.0039
Stddev	.4	.035	.10	.0002	.0002	.020	.0003	.0015	.0026	.0012
%RSD	.3538	.4526	.6713	.0755	.5678	.8143	.5118	1.130	587.1	30.32
#1	101.0	7.639	14.36	.2585	.0282	2.508	.0514	.1351	-.0014	.0052
#2	101.3	7.611	14.36	.2586	.0285	2.498	.0518	.1378	.0034	.0039
#3	100.6	7.680	14.19	.2589	.0285	2.469	.0513	.1377	-.0006	.0028

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.417	.0327	1.067	.9886	-.0027	.2033	.2157
Stddev	.009	.0002	.005	.0011	.0004	.0011	.0004
%RSD	.1561	.6469	.4644	.1116	16.22	.5238	.2065
#1	5.427	.0326	1.070	.9877	-.0022	.2045	.2156
#2	5.412	.0329	1.069	.9884	-.0030	.2032	.2162
#3	5.412	.0325	1.061	.9898	-.0030	.2023	.2154

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2770.4	7852.0	63146.	6643.1
Stddev	6.0	11.6	148.	40.2
%RSD	.21610	.14725	.23466	.60532
#1	2777.3	7860.1	63315.	6648.2
#2	2767.2	7838.7	63086.	6600.6
#3	2766.6	7857.1	63037.	6680.6

Zoom In Zoom Out

Sample Name: FA33784-8 Acquired: 5/12/2016 11:33:07 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0014	82.33	.1158	.1035	.0043	80.11	.0006	.0208	.1940	.0732
Stddev	.0005	.15	.0006	.0004	.0001	.11	.0000	.0001	.0001	.0004
%RSD	35.44	.1822	.5582	.3758	3.346	.1326	5.476	.4058	.0674	.5486
#1	.0008	82.45	.1165	.1030	.0042	80.13	.0006	.0208	.1939	.0729
#2	.0017	82.16	.1153	.1036	.0042	79.99	.0006	.0208	.1942	.0731
#3	.0016	82.38	.1155	.1037	.0045	80.20	.0006	.0209	.1939	.0737

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	85.55	9.966	14.61	.3020	.1970	1.578	.0544	.1973	.0004	.0044
Stddev	.07	.036	.04	.0003	.0007	.010	.0004	.0012	.0010	.0035
%RSD	.0850	.3596	.2888	.1008	.3320	.6477	.7068	.5875	279.7	79.52
#1	85.50	9.950	14.61	.3022	.1963	1.584	.0541	.1984	.0003	.0072
#2	85.51	9.941	14.57	.3022	.1971	1.584	.0548	.1972	.0014	.0055
#3	85.63	10.01	14.65	.3017	.1975	1.567	.0543	.1961	-.0006	.0005

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.346	.0260	.5514	.8466	-.0027	.1996	.2223
Stddev	.004	.0004	.0009	.0009	.0009	.0002	.0002
%RSD	.1044	1.440	.1649	.1027	32.40	.0901	.1078
#1	3.343	.0257	.5510	.8459	-.0035	.1997	.2221
#2	3.346	.0264	.5507	.8463	-.0029	.1996	.2225
#3	3.350	.0260	.5524	.8475	-.0018	.1994	.2225

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2842.4	7850.8	64235.	6607.3
Stddev	3.5	9.8	248.	4.6
%RSD	.12253	.12443	.38574	.06905
#1	2838.8	7856.0	64266.	6612.5
#2	2842.9	7839.5	63973.	6604.0
#3	2845.7	7856.8	64465.	6605.3

Zoom In Zoom Out

Sample Name: FA33784-10 Acquired: 5/12/2016 11:37:10 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	46.73	.0463	.1725	.0023	684.6	.0016	.0103	.1373	.9760
Stddev	.001	.12	.0005	.0006	.0001	2.8	.0002	.0001	.0008	.0031
%RSD	1717.	.2491	1.144	.3306	2.722	.4113	9.314	.9697	.5770	.3217
#1	-.0007	46.86	.0463	.1731	.0022	684.7	.0015	.0104	.1364	.9757
#2	.0002	46.69	.0457	.1723	.0022	687.3	.0018	.0102	.1377	.9730
#3	.0004	46.63	.0468	.1720	.0023	681.7	.0016	.0103	.1377	.9793

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	67.95	6.929	13.77	.6948	.0252	16.42	.0460	.2306	.0009	.0013
Stddev	.06	.009	.01	.0004	.0002	.07	.0001	.0021	.0013	.0019
%RSD	.0844	.1341	.0830	.0640	.6278	.4451	.1505	.9229	150.7	146.2
#1	68.02	6.920	13.77	.6951	.0252	16.48	.0460	.2286	-.0007	-.0001
#2	67.91	6.928	13.76	.6943	.0254	16.42	.0461	.2303	.0017	.0006
#3	67.93	6.939	13.78	.6951	.0251	16.34	.0460	.2328	.0016	.0035

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.984	.0219	2.852	.7914	-.0035	.1051	.6181
Stddev	.003	.0006	.008	.0014	.0005	.0006	.0007
%RSD	.0662	2.858	.2870	.1707	14.83	.5646	.1064
#1	3.987	.0223	2.860	.7903	-.0039	.1049	.6182
#2	3.984	.0212	2.852	.7909	-.0029	.1046	.6173
#3	3.982	.0223	2.844	.7929	-.0036	.1057	.6186

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2564.7	7606.8	61319.	6537.8
Stddev	2.1	15.2	173.	8.6
%RSD	.08279	.20000	.28187	.13226
#1	2564.1	7589.5	61333.	6536.1
#2	2567.0	7618.0	61485.	6530.2
#3	2562.8	7613.0	61140.	6547.2

Zoom In Zoom Out

Sample Name: FA33784-13 Acquired: 5/12/2016 11:45:42 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 4.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0022	46.81	.0452	.0830	.0014	1309.	-.0007	.0084	.1267	.2464
Stddev	.0007	.13	.0015	.0007	.0001	5.	.0000	.0006	.0005	.0016
%RSD	33.03	.2879	3.407	.8377	6.791	.4084	6.672	7.749	.3912	.6600
#1	-.0030	46.94	.0437	.0838	.0014	1305.	-.0006	.0086	.1271	.2448
#2	-.0019	46.67	.0450	.0825	.0013	1307.	-.0007	.0088	.1262	.2463
#3	-.0016	46.80	.0468	.0828	.0014	1315.	-.0007	.0076	.1270	.2480

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	56.84	5.903	13.90	.3818	.0219	15.93	.0305	.3034	-.0042	-.0009
Stddev	.10	.108	.09	.0005	.0004	.02	.0003	.0046	.0028	.0011
%RSD	.1793	1.824	.6607	.1371	1.606	.1249	.9285	1.504	66.03	117.7
#1	56.73	6.010	14.00	.3813	.0223	15.95	.0303	.3072	-.0073	-.0021
#2	56.93	5.905	13.90	.3818	.0217	15.91	.0308	.2984	-.0020	-.0006
#3	56.87	5.795	13.81	.3824	.0216	15.94	.0303	.3048	-.0033	.0000

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	4.421	.0189	6.127	.6385	-.0037	.1061	.5665
Stddev	.005	.0005	.006	.0010	.0018	.0005	.0010
%RSD	.1209	2.413	.0974	.1640	48.96	.4243	.1696
#1	4.425	.0191	6.130	.6378	-.0047	.1056	.5676
#2	4.415	.0192	6.130	.6380	-.0048	.1064	.5659
#3	4.425	.0184	6.120	.6397	-.0016	.1063	.5660

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2595.8	7020.1	56868.	5935.4
Stddev	2.1	5.5	239.	23.7
%RSD	.08042	.07855	.42108	.40010
#1	2593.3	7014.5	56683.	5911.5
#2	2596.9	7025.5	57139.	5935.6
#3	2597.0	7020.4	56783.	5959.0

Zoom In Zoom Out

Sample Name: FA33784-15 Acquired: 5/12/2016 11:49:55 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0013	49.32	.0353	.0877	.0008	169.2	.0008	.0105	.1306	.2345
Stddev	.0009	.05	.0035	.0009	.0003	.4	.0001	.0002	.0006	.0013
%RSD	67.90	.0952	9.826	.9767	32.04	.2507	6.698	1.896	.4572	.5671
#1	-.0017	49.27	.0392	.0867	.0011	168.8	.0008	.0107	.1306	.2350
#2	-.0019	49.36	.0327	.0882	.0006	169.2	.0007	.0104	.1300	.2330
#3	-.0003	49.33	.0340	.0882	.0008	169.6	.0008	.0104	.1312	.2356

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	57.81	5.730	13.41	.3093	.0039	10.86	.0281	.1000	-.0031	-.0002
Stddev	.26	.057	.12	.0010	.0003	.06	.0005	.0018	.0012	.0026
%RSD	.4513	.9856	.9021	.3083	7.051	.5192	1.828	1.821	37.40	1168.
#1	57.58	5.756	13.49	.3088	.0036	10.89	.0280	.1021	-.0039	-.0032
#2	57.74	5.665	13.27	.3104	.0041	10.89	.0286	.0988	-.0018	.0018
#3	58.09	5.769	13.47	.3087	.0041	10.80	.0276	.0992	-.0037	.0008

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	4.614	.0183	.9070	.8737	-.0003	.1200	.2441
Stddev	.003	.0009	.0020	.0007	.0018	.0010	.0002
%RSD	.0628	4.965	.2253	.0853	539.6	.8390	.0666
#1	4.615	.0183	.9050	.8745	-.0021	.1189	.2439
#2	4.615	.0173	.9069	.8738	-.0002	.1203	.2442
#3	4.610	.0191	.9091	.8730	.0014	.1209	.2441

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2909.9	7473.1	60953.	6187.4
Stddev	1.9	16.8	294.	19.6
%RSD	.06679	.22488	.48176	.31626
#1	2908.4	7492.5	61290.	6192.6
#2	2912.1	7464.1	60817.	6203.9
#3	2909.3	7462.7	60751.	6165.8

Zoom In Zoom Out

Sample Name: FA33784-16 Acquired: 5/12/2016 11:53:59 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0017	20.58	.0363	.0485	.0007	870.4	-.0004	.0037	.0510	.0084
Stddev	.0003	.02	.0013	.0002	.0002	11.8	.0000	.0001	.0006	.0002
%RSD	18.50	.1158	3.687	.3609	22.39	1.354	11.50	3.063	1.102	2.189
#1	-.0015	20.58	.0354	.0484	.0009	856.8	-.0004	.0037	.0504	.0085
#2	-.0014	20.56	.0355	.0486	.0006	876.5	-.0004	.0038	.0513	.0082
#3	-.0020	20.61	.0378	.0483	.0007	877.9	-.0005	.0036	.0514	.0085

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	23.34	2.697	6.798	.1786	.0089	18.93	.0127	.0247	-.0001	-.0009
Stddev	.04	.004	.028	.0012	.0002	.03	.0002	.0008	.0012	.0006
%RSD	.1649	.1393	.4105	.6671	2.274	.1827	1.335	3.426	1002.	69.50
#1	23.30	2.693	6.781	.1773	.0086	18.90	.0128	.0237	.0001	-.0017
#2	23.37	2.697	6.783	.1788	.0090	18.96	.0125	.0253	-.0014	-.0006
#3	23.36	2.701	6.830	.1796	.0090	18.94	.0128	.0250	.0009	-.0005

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.351	.0153	3.988	.3942	-.0040	.0555	.0414
Stddev	.006	.0005	.005	.0019	.0015	.0008	.0001
%RSD	.1759	3.424	.1216	.4776	36.62	1.512	.1675
#1	3.358	.0149	3.982	.3921	-.0040	.0547	.0414
#2	3.347	.0159	3.989	.3959	-.0025	.0554	.0415
#3	3.348	.0150	3.992	.3945	-.0054	.0564	.0414

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2528.4	7262.5	58398.	6295.9
Stddev	7.5	3.4	81.	25.6
%RSD	.29793	.04615	.13892	.40619
#1	2535.3	7263.2	58423.	6312.6
#2	2520.3	7258.8	58308.	6308.7
#3	2529.5	7265.4	58464.	6266.5

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/12/2016 12:02:53 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2514	40.29	1.975	2.023	2.013	40.09	2.031	2.016	2.001	2.027
Stddev	.0011	.27	.001	.011	.017	.26	.002	.001	.003	.002
%RSD	.4303	.6728	.0551	.5485	.8210	.6465	.0730	.0416	.1322	.1023
#1	.2502	40.31	1.976	2.025	2.011	40.10	2.030	2.016	2.004	2.026
#2	.2522	40.01	1.974	2.011	1.998	39.83	2.033	2.016	1.999	2.026
#3	.2520	40.56	1.976	2.033	2.031	40.35	2.030	2.015	2.000	2.030
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.34	40.71	40.32	2.061	2.028	40.41	2.004	2.006	1.987	1.983
Stddev	.20	.28	.38	.002	.004	.30	.001	.006	.001	.001
%RSD	.4908	.6843	.9318	.1054	.2231	.7333	.0301	.3058	.0580	.0421
#1	41.34	40.79	40.28	2.062	2.023	40.44	2.005	1.999	1.986	1.983
#2	41.14	40.40	39.97	2.059	2.029	40.10	2.005	2.009	1.987	1.983
#3	41.55	40.93	40.72	2.063	2.031	40.70	2.004	2.010	1.988	1.984
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.737	2.028	2.083	2.087	2.025	2.037	2.027
Stddev	.002	.003	.017	.003	.002	.003	.002
%RSD	.1162	.1613	.8026	.1477	.1115	.1228	.1146
#1	1.739	2.028	2.084	2.084	2.023	2.039	2.025
#2	1.736	2.031	2.066	2.088	2.027	2.037	2.029
#3	1.735	2.025	2.099	2.090	2.027	2.034	2.026
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/12/2016 12:02:53 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2594.3	6631.4	54143.	5579.3
Stddev	7.1	6.6	148.	24.2
%RSD	.27263	.09885	.27257	.43306
#1	2602.1	6638.9	53974.	5576.2
#2	2592.4	6628.5	54244.	5604.8
#3	2588.4	6626.8	54211.	5556.8

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/12/2016 12:06:50 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0046	.0011	.0001	-.0002	.0109	.0000	.0001	-.0001
Stddev	.0003	.0037	.0008	.0002	.0001	.0076	.0000	.0001	.0002
%RSD	97.15	80.99	69.98	124.3	69.28	69.54	109.9	54.88	276.8
#1	-.0003	.0038	.0020	.0001	-.0001	.0192	.0001	.0001	-.0002
#2	-.0005	.0013	.0007	.0003	-.0001	.0095	.0000	.0000	.0000
#3	.0000	.0086	.0006	.0000	-.0003	.0042	.0000	.0001	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0007	.0149	.0129	-.0123	-.0001	F.0017	.0707	.0000	.0003
Stddev	.0002	.0035	.0078	.0082	.0000	.0005	.0046	.0002	.0006
%RSD	21.84	23.38	60.43	67.04	39.48	27.81	6.437	529.1	213.5
#1	-.0009	.0164	.0216	-.0215	.0000	.0022	.0680	-.0001	-.0003
#2	-.0007	.0174	.0105	-.0057	.0000	.0017	.0682	.0002	.0009
#3	-.0006	.0109	.0066	-.0096	-.0001	.0012	.0760	-.0001	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0012	-.0006	.0013	.0002	.0000	.0008	-.0003	.0000	-.0011
Stddev	.0002	.0012	.0002	.0003	.0001	.0001	.0004	.0002	.0001
%RSD	18.40	213.6	16.96	167.6	192.1	13.65	154.3	2759.	8.385
#1	.0009	-.0020	.0011	-.0001	.0001	.0009	-.0007	.0002	-.0010
#2	.0012	.0003	.0012	.0004	.0000	.0009	.0001	-.0003	-.0011
#3	.0014	-.0001	.0015	.0002	.0000	.0007	-.0002	.0001	-.0011
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/12/2016 12:06:50 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3061.9	6984.2	57358.	5692.4
Stddev	2.8	2.0	145.	16.3
%RSD	.09122	.02925	.25192	.28623
#1	3061.7	6982.0	57295.	5700.9
#2	3059.3	6984.6	57524.	5702.7
#3	3064.8	6986.0	57256.	5673.6

Zoom In Zoom Out

Sample Name: FA33676-5 Acquired: 5/12/2016 12:10:59 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 20.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0064	-.0141	.0096	.0384	-.0088	98.67	-.0027	-.0008	-.0019	-.0186
Stddev	.0035	.0377	.0116	.0023	.0031	.02	.0006	.0015	.0024	.0088
%RSD	53.81	266.5	120.9	6.020	35.42	.0206	20.87	176.9	130.6	47.54
#1	-.0096	-.0448	-.0037	.0406	-.0081	98.64	-.0027	-.0008	-.0001	-.0180
#2	-.0070	-.0256	.0146	.0360	-.0122	98.68	-.0021	.0006	-.0008	-.0276
#3	-.0027	.0280	.0178	.0386	-.0061	98.67	-.0032	-.0023	-.0047	-.0100

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	-.1465	33.69	68.42	.1654	-.0056	854.0	-.0031	-.0094	-.0108	-.0146
Stddev	.0837	.27	.22	.0011	.0017	1.6	.0018	.0135	.0140	.0239
%RSD	57.12	.8101	.3176	.6856	31.24	.1896	59.35	144.1	129.6	163.7
#1	-.0818	34.01	68.31	.1642	-.0053	855.5	-.0016	.0042	-.0270	-.0420
#2	-.1167	33.51	68.67	.1664	-.0074	852.3	-.0025	-.0095	-.0041	-.0034
#3	-.2410	33.56	68.28	.1655	-.0040	854.2	-.0051	-.0228	-.0015	.0017

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	4.255	-.0059	.7526	.0038	-.0013	-.0035	.1273
Stddev	.023	.0054	.0032	.0009	.0174	.0017	.0012
%RSD	.5386	91.82	.4253	24.89	1313.	47.76	.9784
#1	4.278	-.0086	.7545	.0049	-.0206	-.0016	.1285
#2	4.255	.0003	.7489	.0035	.0132	-.0049	.1272
#3	4.232	-.0094	.7543	.0030	.0034	-.0041	.1260

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2851.7	6837.7	55076.	5647.7
Stddev	3.9	7.8	89.	35.4
%RSD	.13633	.11355	.16135	.62744
#1	2855.4	6846.6	55176.	5654.8
#2	2852.0	6834.6	55008.	5609.2
#3	2847.7	6832.0	55043.	5679.0

Zoom In Zoom Out

Sample Name: FA33787-7 Acquired: 5/12/2016 12:15:06 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0080	15.90	.0117	.0737	-.0024	2894.	-.0028	.0015	.0495	-.0019
Stddev	.0021	.06	.0048	.0027	.0004	34.	.0004	.0002	.0014	.0045
%RSD	26.33	.4083	41.03	3.620	17.95	1.191	13.94	11.94	2.767	234.2
#1	-.0104	15.85	.0149	.0752	-.0021	2931.	-.0026	.0016	.0511	.0031
#2	-.0069	15.97	.0140	.0706	-.0021	2890.	-.0033	.0013	.0490	-.0034
#3	-.0067	15.86	.0062	.0753	-.0028	2862.	-.0026	.0016	.0485	-.0056

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	17.32	1.955	7.593	.2392	-.0097	32.54	.0101	.0289	-.0046	-.0090
Stddev	.06	.123	.252	.0003	.0004	.03	.0005	.0032	.0064	.0101
%RSD	.3327	6.288	3.319	.1131	3.801	.0847	4.466	11.14	140.1	112.9
#1	17.35	2.085	7.726	.2394	-.0093	32.57	.0098	.0252	-.0090	-.0206
#2	17.36	1.940	7.302	.2394	-.0097	32.53	.0098	.0311	.0027	-.0041
#3	17.26	1.840	7.750	.2389	-.0100	32.51	.0106	.0304	-.0074	-.0022

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.887	.0137	13.04	.3103	-.0065	.0557	.1221
Stddev	.002	.0019	.01	.0024	.0083	.0011	.0002
%RSD	.0726	13.57	.1095	.7587	128.0	2.031	.1507
#1	2.887	.0125	13.06	.3111	.0019	.0545	.1220
#2	2.889	.0158	13.03	.3121	-.0067	.0561	.1219
#3	2.885	.0127	13.03	.3076	-.0146	.0567	.1223

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2625.6	6761.5	54209.	5711.7
Stddev	11.1	13.4	234.	25.5
%RSD	.42189	.19843	.43120	.44569
#1	2636.3	6776.6	54112.	5722.0
#2	2626.3	6757.1	54040.	5682.7
#3	2614.2	6750.9	54476.	5730.4

Zoom In Zoom Out

Sample Name: FA33784-12 Acquired: 5/12/2016 12:19:21 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0089	12.34	.0339	.0592	-.0029	2748.	-.0034	.0015	.0414	-.0055
Stddev	.0010	.18	.0072	.0006	.0008	23.	.0007	.0002	.0023	.0020
%RSD	11.04	1.491	21.18	1.090	27.87	.8540	20.39	13.74	5.521	36.87
#1	-.0083	12.42	.0275	.0589	-.0034	2722.	-.0026	.0016	.0440	-.0034
#2	-.0083	12.46	.0417	.0588	-.0034	2768.	-.0039	.0017	.0401	-.0075
#3	-.0100	12.13	.0325	.0600	-.0020	2756.	-.0037	.0013	.0400	-.0057

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	21.59	2.082	7.357	.3192	.0196	31.13	.0066	.0270	.0002	-.0070
Stddev	.15	.093	.079	.0005	.0017	.25	.0006	.0062	.0054	.0180
%RSD	.6943	4.470	1.080	.1622	8.436	.8007	8.752	23.07	3376.	257.1
#1	21.60	2.162	7.350	.3195	.0208	31.39	.0065	.0335	-.0022	.0135
#2	21.43	2.104	7.440	.3186	.0203	30.89	.0072	.0211	.0063	-.0146
#3	21.73	1.980	7.282	.3194	.0177	31.11	.0060	.0263	-.0036	-.0199

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.774	.0160	11.64	.2971	-.0107	.0356	.0719
Stddev	.008	.0013	.04	.0012	.0060	.0009	.0003
%RSD	.2769	8.156	.3282	.4171	56.56	2.492	.4612
#1	2.765	.0145	11.67	.2957	-.0169	.0364	.0721
#2	2.778	.0167	11.60	.2974	-.0049	.0346	.0722
#3	2.779	.0168	11.65	.2981	-.0103	.0358	.0716

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2635.2	6776.0	53939.	5654.5
Stddev	5.8	14.2	124.	12.5
%RSD	.21944	.20902	.22940	.22068
#1	2641.8	6791.1	53829.	5668.9
#2	2631.3	6763.0	53914.	5646.2
#3	2632.4	6774.0	54073.	5648.5

Zoom In Zoom Out

Sample Name: FA33784-17 Acquired: 5/12/2016 12:23:35 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0067	7.213	.0553	.0691	-.0033	3078.	-.0042	.0017	.0317	.0041
Stddev	.0030	.090	.0014	.0022	.0014	33.	.0001	.0001	.0019	.0018
%RSD	44.63	1.247	2.560	3.223	42.50	1.074	2.079	6.015	6.123	42.88
#1	-.0033	7.111	.0566	.0681	-.0043	3040.	-.0043	.0018	.0319	.0030
#2	-.0077	7.247	.0556	.0717	-.0017	3094.	-.0041	.0018	.0335	.0031
#3	-.0089	7.281	.0538	.0676	-.0041	3101.	-.0041	.0016	.0297	.0061

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	48.35	1.432	5.455	.5353	-.0122	34.30	.0049	.0399	-.0002	-.0073
Stddev	.27	.236	.078	.0006	.0001	.08	.0012	.0035	.0034	.0157
%RSD	.5483	16.49	1.427	.1050	.5355	.2409	23.40	8.842	2138.	216.8
#1	48.30	1.595	5.386	.5347	-.0122	34.21	.0055	.0414	.0001	.0104
#2	48.64	1.161	5.539	.5355	-.0121	34.32	.0036	.0423	-.0037	-.0198
#3	48.12	1.540	5.439	.5358	-.0121	34.37	.0057	.0358	.0031	-.0123

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.911	.0159	13.44	.1416	-.0083	.0826	.1119
Stddev	.001	.0006	.06	.0002	.0045	.0010	.0011
%RSD	.0579	3.981	.4589	.1676	54.68	1.257	1.011
#1	1.911	.0155	13.40	.1418	-.0037	.0837	.1126
#2	1.912	.0166	13.51	.1414	-.0085	.0823	.1124
#3	1.910	.0156	13.42	.1417	-.0127	.0817	.1106

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2615.7	6617.5	52843.	5564.1
Stddev	5.8	7.3	129.	23.0
%RSD	.22013	.10966	.24362	.41363
#1	2621.9	6612.8	52770.	5590.7
#2	2610.5	6613.8	52991.	5552.3
#3	2614.8	6625.8	52767.	5549.4

Zoom In Zoom Out

Sample Name: MP30348-MB1 Acquired: 5/12/2016 12:27:48 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0007	.0017	-.0001	-.0002	-.0006	.0542	-.0001	-.0001	-.0001	-.0011
Stddev	.0002	.0099	.0006	.0000	.0001	.0086	.0000	.0001	.0002	.0003
%RSD	36.56	585.1	1216.	15.16	12.50	15.91	13.49	55.99	246.2	30.43
#1	-.0007	-.0066	-.0004	-.0002	-.0006	.0443	-.0001	-.0002	.0001	-.0008
#2	-.0009	.0127	-.0004	-.0002	-.0005	.0584	-.0001	-.0001	-.0001	-.0014
#3	-.0004	-.0010	.0007	-.0002	-.0005	.0598	-.0002	-.0002	-.0002	-.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0070	.0070	.0017	-.0003	-.0007	.0698	-.0003	-.0008	.0006	-.0005
Stddev	.0013	.0158	.0049	.0000	.0000	.0020	.0002	.0004	.0009	.0005
%RSD	18.17	224.5	286.8	12.78	.8144	2.803	53.74	44.39	155.8	105.7
#1	-.0055	-.0103	.0027	-.0003	-.0007	.0676	-.0001	-.0005	.0002	-.0002
#2	-.0075	.0206	.0060	-.0003	-.0007	.0711	-.0004	-.0008	-.0001	-.0002
#3	-.0079	.0109	-.0036	-.0002	-.0007	.0708	-.0004	-.0012	.0016	-.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0079	-.0002	-.0002	-.0004	-.0017	-.0004	-.0011
Stddev	.0002	.0003	.0001	.0001	.0007	.0002	.0001
%RSD	2.853	148.0	34.19	16.00	42.29	52.60	5.196
#1	.0079	.0001	-.0003	-.0005	-.0013	-.0007	-.0012
#2	.0077	-.0002	-.0001	-.0004	-.0012	-.0004	-.0012
#3	.0082	-.0004	-.0002	-.0004	-.0025	-.0002	-.0011
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP30348-MB1 Acquired: 5/12/2016 12:27:48 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3077.5	7111.8	57722.	5706.6
Stddev	5.3	8.5	229.	49.5
%RSD	.17104	.11959	.39676	.86817
#1	3076.7	7104.0	57690.	5759.2
#2	3083.2	7120.9	57966.	5660.8
#3	3072.8	7110.5	57511.	5699.8

SGS ACCUTEST FA33720

Zoom In Zoom Out

Sample Name: MP30348-B1 Acquired: 5/12/2016 12:31:59 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0494	27.23	1.980	2.145	.0533	25.61	.0524	.5204	.2079	.2686
Stddev	.0001	.11	.004	.004	.0000	.14	.0001	.0004	.0002	.0006
%RSD	.1428	.3944	.1896	.1926	.0249	.5430	.2382	.0736	.1078	.2387
#1	.0495	27.28	1.976	2.146	.0533	25.71	.0524	.5200	.2081	.2686
#2	.0494	27.30	1.982	2.148	.0533	25.67	.0523	.5203	.2077	.2692
#3	.0494	27.10	1.983	2.140	.0532	25.45	.0526	.5208	.2077	.2679
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	26.70	26.21	25.53	.5467	.4937	25.63	.5180	.5145	.5059	2.006
Stddev	.07	.15	.19	.0006	.0009	.10	.0003	.0020	.0011	.006
%RSD	.2602	.5689	.7377	.1105	.1796	.4013	.0555	.3916	.2126	.3019
#1	26.72	26.31	25.66	.5461	.4926	25.68	.5177	.5164	.5071	1.999
#2	26.76	26.27	25.62	.5473	.4942	25.70	.5182	.5124	.5051	2.011
#3	26.62	26.04	25.32	.5468	.4942	25.51	.5182	.5147	.5056	2.008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0123	.5009	.5175	.5245	2.090	.4934	.5200
Stddev	.0006	.0013	.0030	.0006	.006	.0009	.0005
%RSD	4.582	.2609	.5706	.1057	.2984	.1851	.1056
#1	.0117	.5009	.5192	.5239	2.096	.4935	.5202
#2	.0128	.4996	.5192	.5250	2.084	.4942	.5194
#3	.0123	.5022	.5141	.5246	2.089	.4924	.5204
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP30348-B1 Acquired: 5/12/2016 12:31:59 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2741.8	6867.0	54591.	5636.3
Stddev	12.1	13.7	88.	43.7
%RSD	.44196	.19905	.16099	.77593
#1	2728.3	6853.0	54663.	5639.8
#2	2751.6	6880.3	54617.	5591.0
#3	2745.5	6867.6	54493.	5678.3

Zoom In Zoom Out

Sample Name: FA33665-3F Acquired: 5/12/2016 12:35:56 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0004	.0011	.0007	.0632	-.0005	153.4	-.0003	.0005	.0001	-.0007
Stddev	.0001	.0029	.0008	.0004	.0001	.3	.0000	.0002	.0001	.0001
%RSD	15.09	275.4	122.1	.6796	11.84	.2211	14.41	49.47	83.08	20.34
#1	-.0004	-.0019	.0015	.0628	-.0005	153.0	-.0003	.0005	.0000	-.0005
#2	-.0005	.0012	.0008	.0636	-.0004	153.7	-.0003	.0002	.0000	-.0007
#3	-.0004	.0040	-.0002	.0632	-.0006	153.5	-.0003	.0007	.0002	-.0008

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.4364	.6219	35.96	.0041	-.0007	33.61	.0006	.0000	.0006	.0005
Stddev	.0022	.0004	.11	.0000	.0001	.05	.0000	.000	.0003	.0014
%RSD	.5067	.0614	.3164	.7029	7.622	.1631	5.786	9035.	55.31	302.4
#1	.4348	.6218	35.83	.0041	-.0007	33.55	.0006	-.0003	.0005	.0015
#2	.4356	.6216	36.00	.0041	-.0007	33.66	.0006	.0003	.0010	-.0012
#3	.4390	.6224	36.04	.0041	-.0008	33.62	.0007	.0000	.0003	.0011

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.517	.0000	.1254	.0011	-.0004	.0018	.0012
Stddev	.003	.0002	.0005	.0001	.0002	.0001	.0000
%RSD	.0851	1136.	.3941	7.679	45.50	7.887	1.465
#1	3.514	.0003	.1248	.0011	-.0002	.0019	.0012
#2	3.518	-.0001	.1256	.0010	-.0005	.0018	.0012
#3	3.519	-.0002	.1258	.0012	-.0004	.0016	.0012

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2657.1	6630.7	52960.	5565.3
Stddev	4.6	3.3	290.	71.7
%RSD	.17474	.04992	.54799	1.2875
#1	2657.9	6628.9	52751.	5616.9
#2	2652.1	6628.7	53292.	5483.5
#3	2661.2	6634.6	52838.	5595.6

Zoom In Zoom Out

Sample Name: MP30348-D1 Acquired: 5/12/2016 12:40:05 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0006	.0034	.0008	.0637	-.0005	153.2	-.0003	.0005	.0002	-.0010
Stddev	.0002	.0019	.0001	.0002	.0000	3.1	.0000	.0000	.0002	.0002
%RSD	28.56	55.08	9.963	.3018	4.248	2.035	3.041	9.844	73.56	15.17
#1	-.0008	.0031	.0007	.0637	-.0005	154.8	-.0003	.0005	.0004	-.0009
#2	-.0007	.0055	.0009	.0639	-.0005	149.7	-.0003	.0005	.0003	-.0009
#3	-.0004	.0017	.0008	.0635	-.0004	155.3	-.0003	.0004	.0001	-.0012

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.4271	.6168	36.34	.0040	-.0012	33.88	.0005	.0001	.0006	-.0003
Stddev	.0018	.0311	.19	.0000	.0001	.11	.0001	.0006	.0010	.0006
%RSD	.4256	5.040	.5192	.6698	10.97	.3191	27.41	438.0	166.2	213.9
#1	.4278	.6387	36.30	.0040	-.0013	33.86	.0006	-.0005	-.0006	.0003
#2	.4284	.5813	36.17	.0040	-.0010	33.78	.0006	.0007	.0010	-.0002
#3	.4250	.6306	36.54	.0040	-.0012	34.00	.0004	.0002	.0014	-.0008

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.534	-.0003	.1274	.0008	-.0012	.0019	.0012
Stddev	.004	.0001	.0002	.0001	.0004	.0003	.0000
%RSD	.1102	40.16	.1643	7.520	35.48	15.79	.8909
#1	3.537	-.0002	.1272	.0008	-.0009	.0020	.0012
#2	3.530	-.0004	.1272	.0009	-.0017	.0015	.0012
#3	3.536	-.0002	.1276	.0008	-.0010	.0021	.0012

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2654.5	6637.2	52804.	5543.2
Stddev	4.4	3.3	31.	80.8
%RSD	.16572	.04953	.05881	1.4580
#1	2658.8	6639.2	52771.	5539.4
#2	2650.0	6633.4	52833.	5625.8
#3	2654.7	6639.0	52807.	5464.3

Zoom In Zoom Out

Sample Name: MP30348-SD1 Acquired: 5/12/2016 12:44:15 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0018	-.0267	.0026	.0614	-.0026	155.1	-.0008	.0001	.0006	-.0054
Stddev	.0020	.0519	.0032	.0003	.0006	.7	.0002	.0006	.0005	.0003
%RSD	109.5	194.7	124.2	.4980	22.52	.4289	25.90	630.5	80.44	5.390
#1	-.0031	-.0685	.0045	.0617	-.0026	154.3	-.0009	-.0005	.0012	-.0055
#2	.0005	.0315	-.0011	.0611	-.0020	155.3	-.0006	.0000	.0004	-.0055
#3	-.0029	-.0430	.0044	.0615	-.0032	155.6	-.0010	.0007	.0003	-.0050

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.3736	.4439	37.08	.0030	-.0053	33.74	-.0007	-.0018	-.0038	.0006
Stddev	.0109	.0466	.17	.0000	.0008	.18	.0005	.0013	.0021	.0033
%RSD	2.930	10.50	.4457	1.659	14.42	.5228	70.40	75.92	55.50	562.8
#1	.3629	.4852	37.19	.0030	-.0051	33.55	-.0005	-.0032	-.0046	.0029
#2	.3732	.3934	36.89	.0030	-.0061	33.89	-.0012	-.0005	-.0054	-.0032
#3	.3848	.4532	37.16	.0030	-.0046	33.78	-.0003	-.0016	-.0014	.0021

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.511	-.0022	.1254	.0031	-.0014	.0004	.0385
Stddev	.003	.0002	.0007	.0003	.0041	.0008	.0001
%RSD	.0935	8.609	.5458	10.89	289.9	201.4	.3714
#1	3.509	-.0023	.1250	.0028	.0027	.0004	.0386
#2	3.510	-.0019	.1262	.0034	-.0055	-.0004	.0386
#3	3.515	-.0022	.1250	.0030	-.0015	.0011	.0384

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2888.5	6925.8	55345.	5581.8
Stddev	4.5	3.4	346.	34.9
%RSD	.15603	.04858	.62457	.62524
#1	2884.1	6923.2	55720.	5562.3
#2	2888.4	6924.7	55039.	5622.1
#3	2893.1	6929.6	55277.	5561.1

Zoom In Zoom Out

Sample Name: MP30348-PS1 Acquired: 5/12/2016 12:48:21 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0482	2.599	.1057	.3368	.0526	153.2	.0529	.0529	.0535	.1100
Stddev	.0004	.004	.0007	.0006	.0001	.4	.0001	.0001	.0004	.0007
%RSD	.8419	.1371	.6481	.1706	.1507	.2909	.1348	.1622	.7080	.6540
#1	.0480	2.601	.1050	.3363	.0526	152.9	.0528	.0528	.0532	.1098
#2	.0478	2.600	.1059	.3374	.0527	153.7	.0529	.0529	.0539	.1108
#3	.0486	2.595	.1063	.3366	.0525	153.0	.0529	.0530	.0534	.1094

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	3.576	11.16	40.11	.0602	.1015	42.63	.1028	.0525	.1092	.1015
Stddev	.007	.07	.10	.0002	.0003	.15	.0000	.0007	.0010	.0011
%RSD	.1867	.5969	.2464	.2932	.2900	.3430	.0320	1.292	.9462	1.064
#1	3.583	11.13	40.16	.0600	.1014	42.53	.1028	.0521	.1091	.1019
#2	3.573	11.24	40.18	.0601	.1013	42.80	.1028	.0532	.1102	.1003
#3	3.571	11.11	40.00	.0604	.1019	42.57	.1028	.0521	.1082	.1024

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.433	.0483	.1743	.1109	.1030	.0528	.2737
Stddev	.001	.0002	.0005	.0004	.0000	.0006	.0007
%RSD	.0132	.3661	.2995	.3296	.0408	1.127	.2729
#1	3.433	.0483	.1743	.1105	.1030	.0522	.2731
#2	3.432	.0481	.1749	.1111	.1029	.0534	.2735
#3	3.432	.0485	.1739	.1111	.1030	.0528	.2746

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2625.1	6668.8	52425.	5528.2
Stddev	9.7	9.4	55.	18.0
%RSD	.36930	.14130	.10502	.32514
#1	2627.6	6670.1	52397.	5530.1
#2	2633.3	6677.6	52489.	5509.4
#3	2614.4	6658.9	52390.	5545.2

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/12/2016 12:52:22 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2567	39.92	1.955	2.042	2.047	39.57	2.050	2.027	1.998	2.073
Stddev	.0011	.15	.001	.004	.004	.13	.001	.002	.001	.003
%RSD	.4305	.3863	.0627	.1921	.2148	.3234	.0596	.0798	.0700	.1584
#1	.2554	40.00	1.956	2.044	2.047	39.67	2.051	2.029	1.998	2.070
#2	.2573	40.02	1.954	2.045	2.051	39.61	2.049	2.027	1.996	2.076
#3	.2573	39.74	1.956	2.038	2.042	39.43	2.049	2.026	1.999	2.074
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	42.40	41.38	40.37	2.123	2.028	40.03	1.985	2.057	1.972	1.959
Stddev	.11	.16	.07	.001	.003	.13	.001	.004	.001	.004
%RSD	.2681	.3758	.1712	.0658	.1549	.3258	.0610	.1816	.0268	.1873
#1	42.35	41.46	40.44	2.124	2.026	40.14	1.986	2.062	1.973	1.956
#2	42.52	41.47	40.31	2.121	2.026	40.05	1.984	2.055	1.972	1.963
#3	42.31	41.20	40.35	2.123	2.031	39.89	1.985	2.055	1.972	1.958
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.716	1.977	2.130	2.169	2.076	2.055	2.039
Stddev	.002	.002	.006	.001	.005	.003	.002
%RSD	.1049	.0810	.2794	.0624	.2465	.1562	.1166
#1	1.717	1.979	2.131	2.168	2.078	2.056	2.042
#2	1.717	1.975	2.135	2.170	2.070	2.058	2.037
#3	1.714	1.977	2.123	2.170	2.080	2.052	2.038
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/12/2016 12:52:22 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2582.8	6728.0	53094.	5537.1
Stddev	4.3	7.0	149.	40.0
%RSD	.16537	.10433	.28142	.72260
#1	2582.4	6732.8	53105.	5538.7
#2	2587.2	6731.3	53238.	5496.3
#3	2578.7	6719.9	52940.	5576.2

SGS ACCUTEST FA33720

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/12/2016 12:56:17 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0007	.0000	.0013	.0001	-.0001	.0027	.0000	.0000	.0001
Stddev	.0007	.0170	.0001	.0002	.0002	.0038	.0000	.0000	.0002
%RSD	97.55	57520.	9.194	254.9	231.5	142.3	72.09	34.21	173.6
#1	-.0005	.0170	.0013	.0002	.0001	.0063	.0001	.0001	.0002
#2	-.0001	-.0170	.0014	.0001	.0000	.0032	.0000	.0000	.0002
#3	-.0014	.0001	.0012	-.0001	-.0002	-.0014	.0000	.0000	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0010	.0156	-.0063	-.0071	.0000	F.0018	.0549	.0000	-.0004
Stddev	.0003	.0081	.0150	.0039	.000	.0005	.0107	.000	.0004
%RSD	28.25	52.05	236.5	55.37	127.4	25.33	19.40	347.0	108.2
#1	-.0013	.0200	-.0201	-.0073	.0000	.0023	.0664	.0001	.0000
#2	-.0008	.0207	.0097	-.0109	.0000	.0017	.0454	-.0001	-.0008
#3	-.0009	.0062	-.0086	-.0031	-.0001	.0014	.0529	-.0001	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0013	-.0010	.0019	.0001	-.0001	.0011	.0006	-.0002	-.0011
Stddev	.0007	.0010	.0003	.0001	.0002	.0001	.0009	.0004	.0000
%RSD	49.65	105.0	14.14	136.9	163.7	10.40	152.5	169.6	2.679
#1	.0019	-.0019	.0020	.0001	.0000	.0012	.0010	-.0002	-.0010
#2	.0006	-.0012	.0021	-.0001	-.0001	.0010	.0012	.0002	-.0011
#3	.0015	.0001	.0016	.0002	-.0003	.0010	-.0004	-.0006	-.0011
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/12/2016 12:56:17 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3092.0	7165.0	56762.	5661.1
Stddev	11.7	36.4	101.	33.6
%RSD	.37753	.50740	.17713	.59430
#1	3105.2	7207.0	56714.	5656.9
#2	3082.9	7145.9	56694.	5696.6
#3	3087.9	7142.2	56877.	5629.7

Zoom In Zoom Out

Sample Name: MP30348-S1 Acquired: 5/12/2016 13:00:26 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0490	27.57	1.939	2.168	.0533	177.8	.0499	.4937	.2017	.2656
Stddev	.0003	.08	.002	.004	.0001	3.4	.0000	.0004	.0005	.0005
%RSD	.6820	.2724	.1222	.1944	.2710	1.886	.0827	.0775	.2622	.1895
#1	.0490	27.60	1.936	2.170	.0535	174.9	.0499	.4933	.2011	.2654
#2	.0494	27.49	1.940	2.163	.0534	181.5	.0499	.4937	.2019	.2661
#3	.0487	27.63	1.940	2.171	.0532	177.1	.0498	.4940	.2021	.2652

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	27.01	27.32	61.68	.5353	.4841	59.44	.4879	.5105	.4936	1.958
Stddev	.07	.11	.16	.0019	.0001	.21	.0006	.0004	.0006	.006
%RSD	.2778	.4199	.2620	.3599	.0190	.3579	.1166	.0845	.1117	.3035
#1	26.94	27.36	61.60	.5332	.4840	59.59	.4873	.5109	.4930	1.951
#2	26.99	27.19	61.56	.5369	.4840	59.20	.4879	.5100	.4938	1.962
#3	27.09	27.41	61.86	.5358	.4842	59.53	.4884	.5106	.4941	1.961

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.444	.4774	.6520	.5282	2.040	.4881	.4989
Stddev	.002	.0005	.0019	.0015	.002	.0006	.0004
%RSD	.0500	.0993	.2970	.2919	.0926	.1176	.0823
#1	3.443	.4769	.6524	.5265	2.038	.4874	.4984
#2	3.446	.4774	.6499	.5295	2.039	.4882	.4991
#3	3.444	.4778	.6537	.5286	2.042	.4886	.4991

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2544.6	6728.8	52557.	5460.7
Stddev	4.8	5.5	229.	28.2
%RSD	.19023	.08189	.43515	.51600
#1	2544.8	6730.0	52787.	5492.1
#2	2549.3	6733.6	52330.	5452.3
#3	2539.7	6722.8	52552.	5437.7

Zoom In Zoom Out

Sample Name: MP30348-S2 Acquired: 5/12/2016 13:04:33 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0506	27.88	2.001	2.236	.0547	176.8	.0512	.5074	.2077	.2718
Stddev	.0009	.02	.002	.002	.0001	1.4	.0002	.0008	.0005	.0007
%RSD	1.831	.0662	.1207	.1045	.2736	.7990	.2971	.1539	.2426	.2542
#1	.0497	27.88	1.998	2.238	.0546	175.3	.0512	.5074	.2083	.2710
#2	.0516	27.90	2.003	2.234	.0549	178.1	.0514	.5082	.2075	.2720
#3	.0506	27.86	2.001	2.234	.0547	177.0	.0511	.5066	.2074	.2724

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	27.31	27.61	62.32	.5515	.4893	60.17	.5024	.5232	.5057	2.016
Stddev	.04	.05	.24	.0011	.0009	.03	.0003	.0019	.0023	.001
%RSD	.1542	.1812	.3914	.1942	.1836	.0415	.0617	.3554	.4503	.0640
#1	27.28	27.56	62.04	.5515	.4902	60.14	.5026	.5210	.5074	2.017
#2	27.36	27.66	62.50	.5526	.4892	60.18	.5025	.5240	.5067	2.017
#3	27.29	27.60	62.42	.5505	.4884	60.19	.5020	.5245	.5031	2.014

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.509	.4845	.6600	.5339	2.087	.5022	.5119
Stddev	.006	.0008	.0010	.0013	.005	.0013	.0009
%RSD	.1649	.1591	.1492	.2346	.2387	.2602	.1717
#1	3.513	.4838	.6588	.5339	2.081	.5037	.5113
#2	3.511	.4853	.6605	.5351	2.088	.5014	.5129
#3	3.502	.4844	.6606	.5326	2.091	.5014	.5116

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2539.2	6699.9	51963.	5518.4
Stddev	10.6	10.3	180.	25.7
%RSD	.41675	.15299	.34699	.46659
#1	2551.3	6709.6	51885.	5539.7
#2	2531.9	6689.2	51834.	5525.6
#3	2534.3	6700.9	52169.	5489.8

Zoom In Zoom Out

Sample Name: FA33665-4F Acquired: 5/12/2016 13:08:39 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0005	.0086	.0009	.0785	-.0005	85.89	-.0002	-.0002	.0003	-.0005
Stddev	.0001	.0062	.0006	.0002	.0002	.44	.0000	.0000	.0002	.0002
%RSD	21.93	72.20	65.39	.2120	30.19	.5075	11.39	17.11	68.02	36.71
#1	-.0004	.0133	.0015	.0784	-.0005	85.45	-.0002	-.0002	.0001	-.0005
#2	-.0006	.0108	.0004	.0784	-.0004	85.90	-.0002	-.0001	.0002	-.0007
#3	-.0006	.0016	.0006	.0787	-.0007	86.32	-.0002	-.0002	.0005	-.0003

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0079	1.638	35.34	.0002	.0087	18.70	.0008	.0003	.0008	.0029
Stddev	.0020	.020	.20	.0000	.0001	.09	.0000	.0001	.0006	.0011
%RSD	24.73	1.225	.5616	6.050	1.112	.4986	4.510	29.07	74.02	38.15
#1	.0102	1.615	35.13	.0002	.0086	18.61	.0008	.0003	.0001	.0019
#2	.0071	1.653	35.37	.0001	.0086	18.69	.0008	.0003	.0010	.0027
#3	.0065	1.645	35.52	.0001	.0088	18.79	.0008	.0002	.0013	.0041

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.136	-.0002	.1762	.0013	.0001	.0025	.0090
Stddev	.002	.0001	.0004	.0000	.0002	.0002	.0001
%RSD	.0933	59.15	.2255	2.074	259.3	9.031	.6908
#1	2.139	-.0001	.1758	.0013	-.0001	.0028	.0090
#2	2.135	-.0003	.1764	.0013	.0000	.0025	.0089
#3	2.136	-.0003	.1765	.0013	.0004	.0023	.0090

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2731.9	6790.2	53577.	5475.6
Stddev	1.8	7.4	329.	39.9
%RSD	.06629	.10832	.61320	.72901
#1	2732.5	6782.3	53227.	5521.7
#2	2733.4	6796.8	53879.	5450.6
#3	2729.9	6791.4	53625.	5454.6

Zoom In Zoom Out

Sample Name: FA33665-5F Acquired: 5/12/2016 13:12:45 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0008	.0084	.0003	.0450	-.0005	99.79	-.0003	-.0002	.0001	.0017
Stddev	.0002	.0047	.0002	.0002	.0000	.50	.0000	.0001	.0001	.0002
%RSD	26.03	55.39	67.14	.4202	6.386	.4964	6.434	28.82	103.7	9.918
#1	-.0006	.0131	.0002	.0451	-.0005	100.2	-.0002	-.0002	.0002	.0019
#2	-.0010	.0038	.0006	.0450	-.0005	99.86	-.0003	-.0002	.0002	.0016
#3	-.0008	.0083	.0002	.0448	-.0004	99.26	-.0003	-.0003	.0000	.0016

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	-.0105	1.838	24.84	.0000	.0022	22.01	.0007	-.0003	.0007	.0004
Stddev	.0038	.007	.20	.000	.0001	.12	.0001	.0012	.0010	.0007
%RSD	36.58	.3861	.8095	104.4	2.400	.5237	17.63	415.8	137.1	156.3
#1	-.0129	1.844	25.07	.0000	.0022	22.12	.0008	-.0017	.0000	.0000
#2	-.0061	1.830	24.72	.0000	.0022	22.01	.0005	.0005	.0018	.0012
#3	-.0124	1.840	24.73	-.0001	.0023	21.89	.0006	.0003	.0003	.0001

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.113	-.0003	.1564	.0009	-.0013	.0019	.0102
Stddev	.001	.0001	.0007	.0001	.0010	.0001	.0001
%RSD	.0579	52.47	.4420	8.535	72.50	5.716	.6915
#1	2.111	-.0005	.1571	.0009	-.0004	.0020	.0101
#2	2.113	-.0002	.1564	.0008	-.0012	.0018	.0101
#3	2.113	-.0002	.1557	.0009	-.0024	.0019	.0103

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2745.2	6828.6	53976.	5546.4
Stddev	10.8	22.8	235.	41.3
%RSD	.39364	.33441	.43480	.74529
#1	2757.3	6854.2	53777.	5500.8
#2	2736.4	6810.2	54235.	5581.5
#3	2742.1	6821.5	53915.	5556.8

Zoom In Zoom Out

Sample Name: FA33665-6F Acquired: 5/12/2016 13:16:52 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0008	-.0034	.0004	.0664	-.0005	164.8	-.0003	-.0002	.0002	-.0006
Stddev	.0002	.0085	.0001	.0002	.0000	.6	.0000	.0001	.0003	.0002
%RSD	24.69	250.4	23.17	.2921	3.302	.3555	10.38	68.03	138.6	42.96
#1	-.0009	.0057	.0003	.0665	-.0005	164.2	-.0003	-.0002	-.0001	-.0005
#2	-.0005	-.0048	.0005	.0661	-.0005	164.9	-.0003	-.0003	.0002	-.0003
#3	-.0009	-.0112	.0005	.0665	-.0005	165.4	-.0003	-.0001	.0006	-.0008

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	-.0119	.1950	41.33	-.0002	-.0011	17.01	.0011	.0002	.0007	.0008
Stddev	.0006	.0200	.10	.0000	.0000	.03	.0001	.0005	.0002	.0013
%RSD	5.365	10.23	.2397	10.97	3.495	.1682	5.271	211.5	28.55	168.2
#1	-.0124	.1800	41.22	-.0002	-.0011	17.00	.0011	-.0002	.0008	.0013
#2	-.0120	.2176	41.36	-.0002	-.0011	17.04	.0011	.0007	.0005	.0017
#3	-.0112	.1873	41.41	-.0002	-.0011	16.98	.0010	.0002	.0008	-.0007

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.858	-.0001	.1255	.0005	-.0010	.0027	.0027
Stddev	.003	.0002	.0001	.0000	.0004	.0001	.0000
%RSD	.1046	304.2	.0917	2.099	38.93	2.942	.9153
#1	2.856	.0002	.1254	.0005	-.0014	.0026	.0028
#2	2.857	-.0002	.1257	.0005	-.0010	.0027	.0027
#3	2.861	-.0003	.1255	.0005	-.0006	.0028	.0027

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2658.4	6664.3	52063.	5488.6
Stddev	5.3	10.5	196.	27.3
%RSD	.19899	.15688	.37619	.49732
#1	2653.8	6661.5	52096.	5512.3
#2	2657.2	6655.6	51853.	5458.7
#3	2664.2	6675.9	52240.	5494.7

Zoom In Zoom Out

Sample Name: FA33665-7F Acquired: 5/12/2016 13:21:07 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0008	.0067	.0000	.0684	-.0004	176.3	-.0003	-.0002	.0000	.0001
Stddev	.0002	.0081	.000	.0001	.0000	2.3	.0000	.0001	.000	.0001
%RSD	29.68	120.8	844.5	.1572	5.409	1.290	3.078	63.71	306.0	90.33
#1	-.0010	-.0015	-.0003	.0683	-.0004	175.7	-.0003	.0000	.0001	.0002
#2	-.0005	.0146	-.0003	.0683	-.0004	178.7	-.0003	-.0003	-.0001	.0000
#3	-.0010	.0069	.0004	.0685	-.0005	174.3	-.0003	-.0003	-.0001	.0002

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	-.0104	.2240	31.80	-.0001	-.0012	7.753	.0008	-.0003	.0007	-.0003
Stddev	.0014	.0260	.12	.0000	.0001	.009	.0002	.0009	.0008	.0006
%RSD	13.93	11.62	.3626	48.18	5.770	.1210	22.30	330.7	109.4	223.9
#1	-.0118	.2198	31.73	-.0001	-.0012	7.746	.0009	-.0011	.0015	-.0009
#2	-.0104	.2518	31.94	.0000	-.0012	7.751	.0006	.0006	.0000	.0004
#3	-.0089	.2003	31.75	.0000	-.0011	7.764	.0009	-.0002	.0006	-.0003

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.893	-.0002	.1642	.0005	-.0016	.0032	.0156
Stddev	.003	.0001	.0001	.0001	.0005	.0000	.0000
%RSD	.0923	25.87	.0637	14.38	29.99	.7789	.0698
#1	2.894	-.0003	.1642	.0005	-.0010	.0032	.0156
#2	2.895	-.0003	.1643	.0004	-.0019	.0032	.0156
#3	2.890	-.0002	.1641	.0005	-.0018	.0032	.0156

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2674.7	6666.4	52498.	5431.8
Stddev	6.1	2.1	297.	17.2
%RSD	.22900	.03200	.56531	.31721
#1	2679.9	6667.9	52241.	5432.0
#2	2676.4	6667.4	52823.	5414.5
#3	2668.0	6664.0	52431.	5448.9

Zoom In Zoom Out

Sample Name: FA33665-11F Acquired: 5/12/2016 13:25:23 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0003	.0098	.0003	.0638	-.0005	137.5	-.0003	-.0003	.0002	-.0004
Stddev	.0001	.0086	.0002	.0001	.0000	.5	.0000	.0001	.0003	.0001
%RSD	31.50	87.74	61.56	.1251	8.800	.3327	8.473	32.01	194.3	16.71
#1	-.0003	.0001	.0006	.0639	-.0005	137.8	-.0003	-.0002	.0004	-.0005
#2	-.0005	.0165	.0002	.0639	-.0005	136.9	-.0003	-.0004	-.0002	-.0004
#3	-.0003	.0130	.0002	.0638	-.0005	137.6	-.0003	-.0003	.0002	-.0003

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	-.0140	.1966	37.38	-.0002	-.0011	11.31	.0002	.0004	.0001	.0001
Stddev	.0025	.0258	.20	.0000	.0001	.02	.0002	.0003	.0005	.0007
%RSD	18.12	13.12	.5254	12.51	10.37	.2017	106.3	63.31	539.0	608.8
#1	-.0111	.2251	37.58	-.0002	-.0011	11.33	.0000	.0002	-.0003	-.0006
#2	-.0155	.1899	37.20	-.0002	-.0010	11.29	.0005	.0007	-.0001	.0001
#3	-.0154	.1748	37.34	-.0002	-.0012	11.31	.0002	.0004	.0007	.0008

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	3.355	-.0003	.1198	.0005	-.0012	.0043	.0122
Stddev	.005	.0001	.0004	.0000	.0010	.0002	.0000
%RSD	.1437	22.10	.3144	6.642	84.38	3.589	.2995
#1	3.354	-.0003	.1199	.0005	-.0010	.0044	.0122
#2	3.352	-.0004	.1193	.0006	-.0023	.0044	.0122
#3	3.361	-.0003	.1200	.0006	-.0003	.0042	.0122

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2704.4	6735.2	53172.	5502.5
Stddev	5.7	9.7	153.	77.6
%RSD	.21109	.14463	.28866	1.4094
#1	2702.7	6730.4	53000.	5421.2
#2	2699.7	6728.7	53219.	5575.7
#3	2710.8	6746.4	53297.	5510.4

Zoom In Zoom Out

Sample Name: FA33665-12F Acquired: 5/12/2016 13:29:31 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0007	.1070	.0007	.2271	-.0004	177.8	-.0003	-.0003	.0005	-.0010
Stddev	.0004	.0142	.0005	.0003	.0001	2.0	.0000	.0001	.0002	.0001
%RSD	50.23	13.25	64.75	.1273	14.77	1.151	10.86	20.01	46.88	14.19
#1	-.0003	.1173	.0003	.2269	-.0004	175.8	-.0004	-.0003	.0004	-.0010
#2	-.0011	.1128	.0006	.2274	-.0004	179.9	-.0003	-.0002	.0003	-.0009
#3	-.0008	.0908	.0012	.2270	-.0005	177.9	-.0003	-.0003	.0008	-.0012

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	.2527	1.081	47.80	.0336	-.0012	26.61	.0002	.0002	.0004	.0008
Stddev	.0036	.026	.32	.0001	.0002	.15	.0001	.0001	.0004	.0004
%RSD	1.438	2.428	.6777	.3814	13.37	.5623	39.34	77.32	82.05	50.55
#1	.2516	1.108	47.55	.0336	-.0012	26.44	.0002	.0001	.0008	.0010
#2	.2568	1.056	48.17	.0334	-.0010	26.72	.0001	.0001	.0005	.0003
#3	.2498	1.078	47.68	.0337	-.0013	26.67	.0003	.0003	.0001	.0009

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	4.170	-.0003	.3296	.0035	-.0013	.0006	.0769
Stddev	.003	.0002	.0011	.0008	.0002	.0001	.0002
%RSD	.0735	80.08	.3401	21.95	15.31	14.27	.2323
#1	4.172	-.0001	.3284	.0044	-.0015	.0006	.0767
#2	4.166	-.0002	.3304	.0033	-.0014	.0007	.0768
#3	4.171	-.0005	.3301	.0029	-.0011	.0005	.0770

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2632.1	6609.0	52379.	5490.3
Stddev	1.8	6.9	135.	21.9
%RSD	.06892	.10469	.25788	.39866
#1	2631.3	6610.5	52313.	5515.4
#2	2634.2	6615.0	52289.	5475.2
#3	2630.8	6601.4	52534.	5480.3

Zoom In Zoom Out

Sample Name: FA33819-2 Acquired: 5/12/2016 13:33:45 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0007	.2686	.0004	.0144	-.0005	71.22	-.0002	-.0001	.0008	-.0009
Stddev	.0002	.0203	.0002	.0002	.0001	.21	.0001	.0000	.0001	.0004
%RSD	21.88	7.551	43.82	1.403	20.45	.2990	27.88	25.24	9.381	40.12
#1	-.0008	.2911	.0003	.0142	-.0006	71.42	-.0001	-.0001	.0009	-.0011
#2	-.0005	.2517	.0003	.0146	-.0005	71.24	-.0002	-.0001	.0008	-.0005
#3	-.0007	.2631	.0006	.0144	-.0004	71.00	-.0002	-.0002	.0008	-.0011

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	.0475	2.397	4.838	.0105	.0070	4.316	-.0002	.0001	.0013	.0032
Stddev	.0039	.032	.038	.0001	.0001	.012	.0001	.0004	.0009	.0021
%RSD	8.257	1.315	.7776	.6812	1.882	.2850	26.77	616.2	69.23	66.56
#1	.0500	2.433	4.850	.0105	.0068	4.329	-.0002	.0005	.0005	.0011
#2	.0430	2.382	4.796	.0104	.0070	4.315	-.0003	-.0003	.0012	.0054
#3	.0495	2.376	4.869	.0105	.0070	4.304	-.0003	.0000	.0022	.0031

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	1.545	.0002	.2664	.0216	-.0016	.0040	.0098
Stddev	.006	.0001	.0005	.0010	.0006	.0001	.0001
%RSD	.3882	54.60	.1736	4.763	35.82	3.298	.6157
#1	1.539	.0001	.2665	.0224	-.0010	.0038	.0098
#2	1.544	.0004	.2667	.0204	-.0017	.0040	.0098
#3	1.551	.0002	.2658	.0218	-.0021	.0040	.0097

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2849.6	6899.9	54694.	5547.6
Stddev	4.0	8.0	158.	43.5
%RSD	.14189	.11559	.28805	.78328
#1	2845.3	6907.0	54844.	5512.6
#2	2850.4	6891.3	54707.	5533.9
#3	2853.2	6901.5	54530.	5596.2

Zoom In Zoom Out

Sample Name: FA33819-3 Acquired: 5/12/2016 13:37:51 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0008	2.783	.0006	.0129	-.0004	91.34	-.0002	-.0003	.0042	-.0007
Stddev	.0001	.026	.0006	.0003	.0000	.51	.0000	.0001	.0003	.0003
%RSD	16.57	.9475	95.18	2.090	4.856	.5542	20.46	29.28	6.838	43.71
#1	-.0009	2.802	.0001	.0131	-.0004	91.42	-.0002	-.0003	.0041	-.0011
#2	-.0007	2.795	.0006	.0129	-.0005	91.80	-.0003	-.0003	.0045	-.0005
#3	-.0006	2.753	.0012	.0126	-.0004	90.80	-.0002	-.0002	.0040	-.0006

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	.1590	2.078	3.838	.0113	.0082	5.437	.0006	.0010	.0006	.0009
Stddev	.0018	.037	.022	.0001	.0001	.022	.0000	.0001	.0005	.0003
%RSD	1.144	1.768	.5659	1.275	1.315	.4108	5.797	10.72	76.93	29.11
#1	.1611	2.114	3.827	.0113	.0082	5.441	.0006	.0009	.0001	.0012
#2	.1577	2.041	3.863	.0115	.0080	5.457	.0006	.0011	.0011	.0008
#3	.1582	2.079	3.825	.0112	.0083	5.413	.0007	.0011	.0007	.0007

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	1.596	.0000	.3300	.1385	-.0015	.0022	.0056
Stddev	.006	.0001	.0007	.0053	.0011	.0002	.0000
%RSD	.3589	494.3	.2206	3.828	75.19	9.050	.2197
#1	1.590	-.0001	.3303	.1397	-.0002	.0024	.0056
#2	1.598	.0000	.3306	.1430	-.0023	.0020	.0056
#3	1.601	.0002	.3292	.1327	-.0020	.0021	.0056

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2801.2	6926.5	54414.	5574.5
Stddev	4.8	4.1	125.	53.9
%RSD	.17240	.05975	.23017	.96641
#1	2797.3	6925.7	54441.	5579.8
#2	2806.6	6931.0	54523.	5518.2
#3	2799.8	6922.8	54277.	5625.6

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/12/2016 13:41:57 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2548	40.18	1.935	2.042	2.071	39.80	2.051	2.028	1.995	2.087
Stddev	.0009	.12	.003	.003	.007	.14	.001	.000	.004	.004
%RSD	.3577	.2982	.1779	.1612	.3551	.3596	.0663	.0183	.2041	.1990
#1	.2555	40.11	1.936	2.040	2.065	39.78	2.052	2.027	1.995	2.085
#2	.2552	40.31	1.931	2.046	2.079	39.95	2.052	2.028	2.000	2.091
#3	.2538	40.10	1.937	2.041	2.068	39.67	2.050	2.028	1.991	2.083
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	42.29	41.75	40.80	2.111	2.022	40.46	1.976	2.061	1.958	1.941
Stddev	.07	.12	.11	.003	.004	.16	.000	.004	.006	.003
%RSD	.1769	.2799	.2752	.1571	.2094	.3991	.0090	.1969	.2878	.1741
#1	42.20	41.78	40.79	2.113	2.019	40.44	1.976	2.058	1.957	1.941
#2	42.33	41.85	40.92	2.112	2.020	40.63	1.976	2.065	1.952	1.938
#3	42.33	41.62	40.70	2.107	2.027	40.31	1.976	2.058	1.964	1.945
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.709	1.961	2.165	2.160	2.073	2.059	2.043
Stddev	.003	.002	.008	.002	.002	.004	.003
%RSD	.1878	.0755	.3888	.1041	.0755	.2208	.1676
#1	1.710	1.959	2.159	2.161	2.074	2.057	2.042
#2	1.705	1.962	2.175	2.161	2.074	2.064	2.047
#3	1.711	1.961	2.161	2.157	2.071	2.055	2.040
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/12/2016 13:41:57 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2595.3	6772.9	53337.	5486.0
Stddev	8.1	12.7	26.	26.8
%RSD	.31112	.18740	.04858	.48842
#1	2602.9	6787.3	53315.	5457.0
#2	2586.8	6763.6	53330.	5491.0
#3	2596.1	6767.7	53366.	5509.9

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/12/2016 13:51:57 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0006	-.0037	.0004	-.0002	-.0005	-.0139	-.0001	.0000	.0000	-.0015
Stddev	.0003	.0085	.0002	.0001	.0000	.0007	.0000	.000	.000	.0001
%RSD	56.56	231.0	56.10	83.62	6.198	5.287	34.92	52.40	3750.	7.130
#1	-.0009	-.0132	.0002	-.0001	-.0005	-.0143	-.0001	-.0001	.0001	-.0015
#2	-.0005	-.0012	.0004	-.0001	-.0005	-.0131	-.0001	.0000	.0000	-.0014
#3	-.0003	.0033	.0006	-.0003	-.0005	-.0144	-.0001	.0000	-.0002	-.0016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0131	-.0268	-.0043	-.0003	-.0005	.0210	-.0001	.0005	-.0001	-.0004
Stddev	.0003	.0104	.0310	.0000	.0002	.0124	.0001	.0003	.0002	.0004
%RSD	2.148	38.58	724.5	7.830	36.16	58.97	85.72	66.31	243.5	101.8
#1	-.0132	-.0384	.0315	-.0003	-.0003	.0238	-.0001	.0001	-.0001	-.0009
#2	-.0134	-.0185	-.0209	-.0003	-.0006	.0317	.0000	.0007	.0001	-.0001
#3	-.0128	-.0236	-.0235	-.0003	-.0005	.0075	-.0002	.0007	-.0002	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0023	-.0004	-.0004	-.0003	-.0002	-.0002	-.0013
Stddev	.0003	.0001	.0001	.0001	.0007	.0002	.0000
%RSD	12.11	22.60	14.29	20.81	432.9	118.1	2.951
#1	.0021	-.0004	-.0005	-.0002	-.0005	-.0005	-.0013
#2	.0026	-.0003	-.0005	-.0003	-.0006	-.0001	-.0013
#3	.0021	-.0004	-.0004	-.0003	.0007	.0000	-.0012
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/12/2016 13:51:57 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3094.3	7153.1	57282.	5669.8
Stddev	6.0	3.2	319.	10.4
%RSD	.19464	.04424	.55629	.18309
#1	3094.4	7149.5	57634.	5661.9
#2	3100.3	7155.3	57012.	5665.9
#3	3088.3	7154.5	57202.	5681.5

Zoom In Zoom Out

Sample Name: ICV Acquired: 5/12/2016 14:17:24 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2408	41.19	1.954	2.070	2.078	42.09	2.007	2.015	2.004	1.983
Stddev	.0001	.20	.002	.011	.012	.24	.001	.002	.003	.003
%RSD	.0513	.4893	.1161	.5220	.5699	.5789	.0580	.0754	.1719	.1713
#1	.2407	41.31	1.955	2.079	2.087	42.26	2.007	2.017	2.008	1.979
#2	.2408	40.96	1.952	2.058	2.064	41.81	2.007	2.015	2.005	1.985
#3	.2409	41.31	1.956	2.074	2.081	42.20	2.005	2.014	2.001	1.985
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.42	42.01	42.81	2.051	1.877	42.58	2.019	1.986	1.977	2.000
Stddev	.26	.22	.37	.000	.002	.24	.003	.002	.003	.004
%RSD	.6518	.5217	.8578	.0159	.0966	.5581	.1555	.0882	.1240	.1976
#1	40.59	42.19	43.00	2.052	1.875	42.75	2.023	1.985	1.979	2.003
#2	40.12	41.77	42.38	2.051	1.877	42.31	2.019	1.988	1.977	2.002
#3	40.56	42.08	43.03	2.051	1.879	42.68	2.016	1.986	1.974	1.996
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0573	2.011	1.977	1.932	2.055	1.884	2.032
Stddev	.0005	.004	.010	.003	.002	.002	.001
%RSD	.8956	.2183	.5062	.1744	.1039	.1289	.0710
#1	.0574	2.015	1.985	1.928	2.057	1.886	2.034
#2	.0578	2.011	1.965	1.935	2.055	1.885	2.032
#3	.0568	2.006	1.979	1.934	2.053	1.881	2.031
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: ICV Acquired: 5/12/2016 14:17:24 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2622.0	6827.6	53850.	5503.2
Stddev	4.6	2.3	144.	51.2
%RSD	.17514	.03310	.26783	.93078
#1	2627.2	6829.3	53706.	5491.6
#2	2620.3	6828.5	53995.	5559.2
#3	2618.4	6825.0	53849.	5458.8

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/12/2016 14:23:20 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2455	39.88	1.926	1.972	2.008	40.08	1.976	1.959	1.975	1.977
Stddev	.0004	.09	.009	.002	.004	.12	.012	.012	.004	.001
%RSD	.1481	.2165	.4464	.1006	.1927	.3063	.6135	.6178	.2144	.0593
#1	.2459	39.85	1.936	1.972	2.005	40.04	1.990	1.973	1.976	1.978
#2	.2454	39.98	1.923	1.974	2.012	40.22	1.970	1.954	1.970	1.976
#3	.2451	39.81	1.919	1.970	2.006	39.98	1.968	1.951	1.978	1.978
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.12	40.16	40.42	2.027	1.975	40.23	1.955	1.946	1.930	1.931
Stddev	.08	.05	.23	.003	.009	.11	.012	.011	.011	.010
%RSD	.1999	.1222	.5606	.1674	.4555	.2734	.5861	.5558	.5748	.5339
#1	41.04	40.11	40.46	2.029	1.985	40.20	1.968	1.958	1.943	1.943
#2	41.21	40.21	40.62	2.023	1.970	40.35	1.948	1.940	1.922	1.927
#3	41.12	40.16	40.17	2.029	1.969	40.14	1.948	1.939	1.925	1.924
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.691	1.988	2.035	2.041	1.958	2.004	1.978
Stddev	.008	.009	.001	.003	.009	.004	.013
%RSD	.4671	.4759	.0449	.1321	.4588	.1955	.6295
#1	1.700	1.998	2.034	2.041	1.968	2.007	1.992
#2	1.685	1.980	2.036	2.038	1.950	2.000	1.972
#3	1.687	1.987	2.035	2.044	1.956	2.005	1.970
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/12/2016 14:23:20 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2625.8	6886.0	53127.	5460.2
Stddev	12.2	36.1	265.	35.2
%RSD	.46496	.52485	.49927	.64481
#1	2611.7	6844.5	53141.	5479.4
#2	2632.0	6902.5	53385.	5419.6
#3	2633.7	6910.8	52856.	5481.6

SGS ACCUTEST FA33720

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/12/2016 14:29:32 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0049	.0008	.0001	.0002	.0040	.0000	.0001	.0000
Stddev	.0002	.0062	.0004	.0003	.0001	.0023	.0000	.0001	.0003
%RSD	68.34	126.5	53.39	329.8	38.79	56.49	69.95	87.18	1146.
#1	.0004	.0099	.0007	.0004	.0003	.0066	.0001	.0002	.0002
#2	.0006	-.0020	.0013	.0001	.0003	.0031	.0000	.0001	-.0003
#3	.0001	.0067	.0004	-.0002	.0001	.0024	.0000	.0000	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0156	.0697	-.0077	.0002	F.0013	.0024	.0001	.0001
Stddev	.0001	.0031	.0043	.0221	.0000	.0001	.0052	.0001	.0001
%RSD	45.68	19.58	6.151	285.5	4.377	6.580	217.7	164.4	121.7
#1	-.0001	.0122	.0669	-.0194	.0002	.0014	.0069	.0000	.0002
#2	-.0004	.0181	.0746	-.0215	.0002	.0013	-.0033	.0001	.0000
#3	-.0003	.0165	.0675	.0177	.0002	.0013	.0037	.0000	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0009	-.0009	-.0001	.0003	.0003	.0009	.0000	.0002	-.0001
Stddev	.0005	.0005	.0002	.0002	.0001	.0001	.0002	.0001	.0001
%RSD	58.67	60.98	220.4	62.40	26.42	8.710	2413.	57.09	83.63
#1	.0008	-.0003	.0002	.0005	.0004	.0010	.0000	.0001	.0000
#2	.0014	-.0009	-.0002	.0001	.0003	.0009	.0003	.0003	-.0001
#3	.0004	-.0014	-.0002	.0005	.0003	.0008	-.0002	.0003	-.0002
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/12/2016 14:29:32 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3078.7	7156.4	56591.	5565.3
Stddev	9.5	15.9	67.	26.8
%RSD	.30784	.22191	.11876	.48109
#1	3072.7	7146.4	56602.	5552.9
#2	3089.6	7174.7	56653.	5596.0
#3	3073.7	7148.1	56519.	5546.9

Zoom In Zoom Out

Sample Name: FA33819-4 Acquired: 5/12/2016 14:32:56 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	.5963	.0003	.0137	-.0001	163.3	-.0002	-.0001	.0024	.0007
Stddev	.0001	.0021	.0007	.0002	.0000	1.0	.0000	.0001	.0001	.0002
%RSD	77.62	.3569	192.8	1.383	50.13	.6182	23.69	78.11	5.621	22.80
#1	.0000	.5954	.0008	.0139	-.0001	162.3	-.0002	-.0001	.0023	.0008
#2	-.0001	.5947	.0007	.0138	-.0001	164.3	-.0002	-.0001	.0024	.0008
#3	-.0002	.5987	-.0004	.0135	.0000	163.2	-.0002	.0000	.0025	.0005

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	6.287	11.93	11.20	.0895	.0199	8.510	.0008	.0004	.0013	.0005
Stddev	.010	.08	.14	.0002	.0002	.040	.0000	.0006	.0006	.0010
%RSD	.1558	.6756	1.247	.1861	1.116	.4711	5.974	130.1	45.83	185.3
#1	6.286	11.94	11.11	.0893	.0201	8.530	.0008	.0004	.0012	.0005
#2	6.297	12.00	11.37	.0896	.0197	8.536	.0007	.0010	.0020	.0016
#3	6.277	11.84	11.13	.0895	.0198	8.463	.0008	-.0001	.0008	-.0004

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.057	.0008	.4936	.0225	-.0010	.0017	.0086
Stddev	.006	.0002	.0021	.0015	.0005	.0003	.0000
%RSD	.5652	30.70	.4176	6.515	52.61	16.48	.1738
#1	1.064	.0009	.4945	.0231	-.0012	.0014	.0086
#2	1.054	.0005	.4950	.0237	-.0004	.0019	.0086
#3	1.054	.0010	.4912	.0209	-.0013	.0016	.0087

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2720.8	6750.4	52819.	5552.0
Stddev	9.0	13.4	65.	75.1
%RSD	.33093	.19896	.12287	1.3524
#1	2717.8	6737.3	52753.	5589.3
#2	2713.7	6749.8	52883.	5465.5
#3	2730.9	6764.1	52819.	5601.0

Zoom In Zoom Out

Sample Name: FA33819-2F Acquired: 5/12/2016 14:37:10 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.0367	.0012	.0144	-.0001	73.86	-.0001	-.0001	.0005	-.0002
Stddev	.0002	.0062	.0009	.0000	.0001	.11	.0000	.0001	.0002	.0001
%RSD	544.9	17.01	73.90	.3448	51.24	.1517	36.77	44.62	38.53	39.34
#1	.0003	.0318	.0021	.0143	-.0001	73.98	-.0001	-.0002	.0004	-.0001
#2	.0001	.0346	.0012	.0144	.0000	73.75	-.0001	-.0001	.0004	-.0002
#3	-.0002	.0437	.0003	.0144	-.0001	73.85	-.0001	-.0001	.0007	-.0003

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0465	2.436	4.935	.0105	.0080	4.348	-.0001	-.0001	.0022	.0021
Stddev	.0039	.025	.015	.0001	.0000	.011	.0001	.0004	.0007	.0004
%RSD	8.336	1.040	.2986	.7305	.1418	.2543	115.0	275.8	31.83	18.26
#1	.0507	2.449	4.921	.0105	.0080	4.359	-.0001	.0001	.0015	.0020
#2	.0459	2.453	4.935	.0105	.0080	4.337	-.0002	.0000	.0029	.0025
#3	.0430	2.407	4.950	.0106	.0080	4.349	.0000	-.0006	.0022	.0018

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.446	.0003	.2573	.0016	-.0011	.0039	.0063
Stddev	.000	.0000	.0006	.0001	.0006	.0002	.0001
%RSD	.0118	15.84	.2281	5.014	56.71	5.270	1.244
#1	1.446	.0004	.2577	.0017	-.0011	.0040	.0062
#2	1.446	.0003	.2567	.0015	-.0016	.0036	.0063
#3	1.446	.0003	.2576	.0016	-.0004	.0040	.0064

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2838.1	6909.9	54129.	5438.5
Stddev	1.6	5.5	52.	14.0
%RSD	.05750	.07905	.09600	.25699
#1	2836.3	6906.7	54176.	5437.4
#2	2838.6	6906.8	54073.	5452.9
#3	2839.4	6916.2	54137.	5425.0

Zoom In Zoom Out

Sample Name: FA33819-3F Acquired: 5/12/2016 14:41:16 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0002	.0367	.0008	.0107	.0000	98.30	-.0002	-.0001	.0006	.0001
Stddev	.0004	.0064	.0005	.0001	.000	.32	.0000	.0001	.0001	.0001
%RSD	191.3	17.42	58.64	1.318	105.8	.3242	17.87	78.03	14.94	66.03
#1	.0004	.0303	.0003	.0105	-.0001	97.98	-.0001	-.0003	.0007	.0000
#2	-.0003	.0431	.0010	.0107	.0000	98.31	-.0002	-.0001	.0005	.0002
#3	.0005	.0368	.0011	.0108	-.0001	98.62	-.0001	.0000	.0006	.0002

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	.0362	2.117	3.954	.0107	.0092	5.854	-.0002	-.0003	.0017	.0006
Stddev	.0009	.020	.013	.0000	.0001	.015	.0001	.0006	.0011	.0013
%RSD	2.483	.9198	.3331	.2222	1.398	.2620	73.12	236.8	67.80	228.6
#1	.0353	2.097	3.962	.0107	.0092	5.837	-.0003	-.0002	.0007	-.0006
#2	.0362	2.136	3.938	.0107	.0092	5.861	-.0001	-.0010	.0015	.0019
#3	.0371	2.117	3.960	.0107	.0090	5.866	-.0001	.0003	.0029	.0004

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	.4805	.0002	.3308	.0013	-.0006	.0015	.0055
Stddev	.0009	.0003	.0004	.0000	.0009	.0001	.0001
%RSD	.1861	110.5	.1216	3.015	157.0	8.126	1.406
#1	.4807	.0000	.3304	.0014	.0003	.0014	.0054
#2	.4813	.0002	.3309	.0013	-.0005	.0016	.0056
#3	.4795	.0005	.3312	.0013	-.0015	.0016	.0055

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2812.6	6916.1	53780.	5465.1
Stddev	7.5	6.0	95.	29.0
%RSD	.26572	.08703	.17687	.53008
#1	2821.1	6923.0	53825.	5466.2
#2	2807.6	6911.7	53845.	5493.5
#3	2808.9	6913.6	53671.	5435.6

Zoom In Zoom Out

Sample Name: FA33819-4F Acquired: 5/12/2016 14:45:23 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0004	.0650	.0003	.0128	.0000	162.5	-.0002	-.0001	.0018	.0001
Stddev	.0005	.0099	.0000	.0001	.000	.4	.0000	.0001	.0003	.0003
%RSD	127.0	15.24	15.34	.8915	208.4	.2588	14.57	231.2	14.78	319.7
#1	-.0002	.0703	.0003	.0127	-.0001	162.8	-.0003	-.0001	.0019	-.0002
#2	.0007	.0535	.0003	.0129	-.0001	162.0	-.0002	.0001	.0020	.0001
#3	.0007	.0710	.0002	.0128	.0001	162.6	-.0002	-.0001	.0015	.0003

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	6.006	11.62	11.06	.0866	.0184	8.374	.0005	-.0003	.0016	.0019
Stddev	.009	.06	.04	.0002	.0001	.048	.0001	.0006	.0005	.0015
%RSD	.1520	.5241	.3942	.2713	.6110	.5699	29.92	209.0	32.31	78.32
#1	6.017	11.68	11.05	.0864	.0185	8.415	.0006	-.0005	.0017	.0033
#2	6.001	11.55	11.03	.0867	.0183	8.321	.0004	-.0008	.0020	.0003
#3	6.001	11.63	11.11	.0869	.0185	8.384	.0004	.0004	.0010	.0020

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	.8523	.0003	.4864	.0011	-.0005	.0014	.0061
Stddev	.0012	.0001	.0009	.0001	.0009	.0001	.0001
%RSD	.1406	46.02	.1871	7.537	168.4	5.647	1.120
#1	.8530	.0002	.4875	.0012	.0001	.0014	.0060
#2	.8530	.0004	.4859	.0010	-.0015	.0013	.0061
#3	.8509	.0002	.4859	.0010	-.0001	.0015	.0061

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2718.1	6746.1	52610.	5474.5
Stddev	4.2	9.1	206.	64.5
%RSD	.15310	.13472	.39067	1.1776
#1	2715.5	6736.2	52757.	5410.5
#2	2715.8	6748.1	52699.	5539.4
#3	2722.9	6754.1	52375.	5473.8

Zoom In Zoom Out

Sample Name: FA33822-1 Acquired: 5/12/2016 14:49:29 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0002	.0128	.0019	.0082	-.0001	78.05	-.0001	-.0002	.0002	-.0001
Stddev	.0003	.0178	.0004	.0001	.0000	.61	.0000	.0001	.0002	.0003
%RSD	117.5	139.6	20.60	.8060	55.51	.7842	37.35	40.65	66.72	197.5
#1	-.0001	.0179	.0022	.0082	-.0001	78.75	-.0001	-.0001	.0003	-.0003
#2	.0004	-.0071	.0020	.0083	-.0001	77.65	-.0001	-.0003	.0001	-.0003
#3	.0004	.0275	.0015	.0081	.0000	77.74	-.0001	-.0002	.0003	.0002

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	.0049	2.392	2.712	.0042	.0001	28.18	.0000	-.0004	.0003	-.0003
Stddev	.0017	.009	.045	.0000	.0001	.21	.000	.0005	.0005	.0014
%RSD	34.74	.3586	1.666	.5694	138.5	.7583	182.6	133.3	194.9	489.5
#1	.0063	2.401	2.756	.0042	.0002	28.42	.0000	.0002	-.0003	.0000
#2	.0030	2.390	2.714	.0042	.0000	28.05	-.0001	-.0005	.0003	-.0017
#3	.0053	2.384	2.665	.0043	.0000	28.06	.0000	-.0009	.0007	.0009

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	1.157	-.0002	.6691	.0012	-.0012	.0001	.0097
Stddev	.003	.0001	.0055	.0001	.0002	.0000	.0000
%RSD	.2166	70.91	.8179	6.135	17.86	54.91	.1554
#1	1.154	-.0003	.6754	.0011	-.0014	.0001	.0097
#2	1.159	-.0001	.6662	.0013	-.0011	.0001	.0097
#3	1.157	-.0001	.6657	.0013	-.0011	.0000	.0097

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2780.4	6874.4	53750.	5502.8
Stddev	4.9	11.5	8.	25.9
%RSD	.17785	.16733	.01493	.47026
#1	2784.4	6887.6	53747.	5474.7
#2	2781.8	6868.7	53759.	5525.6
#3	2774.9	6866.8	53744.	5508.1

Zoom In Zoom Out

Sample Name: FA33822-5 Acquired: 5/12/2016 14:53:37 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.5297	.0020	.0221	.0000	174.8	-.0002	-.0001	.0028	.0014
Stddev	.001	.0013	.0007	.0002	.000	.9	.0001	.0001	.0002	.0002
%RSD	31160.	.2467	34.96	.9719	95.13	.5154	30.03	42.73	7.087	15.30
#1	.0000	.5281	.0024	.0222	-.0001	174.8	-.0001	-.0001	.0027	.0012
#2	-.0005	.5305	.0012	.0218	.0000	174.0	-.0002	-.0001	.0030	.0016
#3	.0005	.5304	.0024	.0222	-.0001	175.8	-.0002	-.0002	.0026	.0014

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	4.173	3.919	4.152	.0348	.0002	37.56	.0017	.0050	.0006	-.0009
Stddev	.032	.027	.016	.0001	.0002	.09	.0001	.0003	.0012	.0005
%RSD	.7607	.6919	.3889	.1458	79.12	.2481	7.256	5.667	208.7	54.09
#1	4.209	3.892	4.150	.0348	.0003	37.65	.0017	.0049	.0010	-.0014
#2	4.157	3.946	4.169	.0349	.0004	37.56	.0015	.0053	.0014	-.0007
#3	4.152	3.920	4.137	.0348	.0000	37.46	.0018	.0048	-.0008	-.0005

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	3.308	-.0001	1.537	.0223	-.0011	.0021	.0869
Stddev	.005	.0001	.004	.0014	.0003	.0003	.0001
%RSD	.1506	103.2	.2255	6.375	27.69	13.23	.0674
#1	3.302	-.0002	1.539	.0217	-.0007	.0024	.0869
#2	3.310	-.0002	1.538	.0214	-.0013	.0020	.0869
#3	3.312	.0000	1.533	.0240	-.0012	.0019	.0870

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2666.8	6755.4	52575.	5483.1
Stddev	4.6	13.4	79.	65.0
%RSD	.17080	.19848	.15044	1.1861
#1	2672.1	6764.0	52563.	5410.9
#2	2664.1	6762.3	52660.	5537.0
#3	2664.3	6740.0	52503.	5501.4

Zoom In Zoom Out

Sample Name: FA33822-8 Acquired: 5/12/2016 14:57:54 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	.0377	.0010	.0096	-.0001	66.91	-.0001	-.0001	.0002	.0007
Stddev	.0004	.0006	.0004	.0003	.0001	.09	.0000	.0001	.0003	.0001
%RSD	645.1	1.499	41.99	3.564	227.5	.1316	24.62	53.38	135.0	19.78
#1	-.0004	.0376	.0005	.0100	-.0002	67.01	-.0001	-.0001	.0002	.0007
#2	.0002	.0372	.0012	.0093	.0000	66.90	-.0001	-.0001	.0000	.0009
#3	.0004	.0383	.0012	.0095	.0000	66.83	-.0001	-.0002	.0005	.0006

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	.1201	2.268	2.663	.0126	.0008	35.47	.0003	.0005	.0009	.0000
Stddev	.0014	.026	.019	.0000	.0001	.06	.0001	.0006	.0003	.002
%RSD	1.128	1.140	.7171	.1117	14.53	.1593	29.02	125.1	37.83	11460.
#1	.1214	2.262	2.676	.0126	.0009	35.50	.0002	-.0002	.0005	.0010
#2	.1187	2.246	2.641	.0126	.0008	35.49	.0004	.0007	.0009	.0009
#3	.1203	2.296	2.672	.0126	.0007	35.40	.0004	.0008	.0012	-.0019

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	1.515	-.0002	.6030	.0020	-.0009	.0009	.0140
Stddev	.004	.0001	.0014	.0002	.0005	.0004	.0001
%RSD	.2783	47.48	.2282	10.70	52.43	38.76	.5573
#1	1.520	-.0001	.6043	.0018	-.0012	.0011	.0139
#2	1.512	-.0003	.6015	.0023	-.0003	.0005	.0141
#3	1.513	-.0003	.6032	.0020	-.0011	.0012	.0140

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2772.4	6873.9	53693.	5580.6
Stddev	4.0	13.0	297.	45.5
%RSD	.14566	.18970	.55310	.81588
#1	2774.0	6860.1	53398.	5604.6
#2	2775.3	6875.3	53992.	5528.1
#3	2767.8	6886.1	53690.	5609.1

Zoom In Zoom Out

Sample Name: FA33822-1F Acquired: 5/12/2016 15:02:02 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	.0188	.0017	.0082	.0000	76.43	-.0001	-.0001	.0000	.0000
Stddev	.0002	.0017	.0007	.0001	.000	.23	.0000	.0002	.0003	.000
%RSD	159.3	9.188	43.35	1.668	59.74	.3057	17.54	182.0	660.6	1498.
#1	.0003	.0184	.0019	.0080	.0000	76.50	-.0001	.0000	.0002	.0000
#2	.0002	.0172	.0009	.0083	.0000	76.17	-.0001	-.0003	-.0003	-.0001
#3	-.0001	.0206	.0023	.0082	.0000	76.62	-.0001	.0000	.0002	.0001

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	.0047	2.327	2.640	.0042	-.0001	27.67	-.0001	-.0007	-.0002	.0001
Stddev	.0032	.027	.033	.0000	.0001	.12	.0002	.0005	.0010	.0002
%RSD	69.22	1.148	1.240	1.154	116.5	.4232	187.7	73.51	457.8	296.0
#1	.0030	2.321	2.615	.0042	.0000	27.69	-.0002	-.0013	-.0014	-.0001
#2	.0084	2.304	2.628	.0041	-.0002	27.54	-.0002	-.0007	.0001	.0001
#3	.0027	2.356	2.677	.0042	.0000	27.78	.0001	-.0002	.0006	.0003

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	1.148	-.0002	.6544	.0012	-.0008	.0002	.0105
Stddev	.002	.0002	.0019	.0000	.0002	.0002	.0001
%RSD	.1999	78.29	.2939	1.604	27.50	93.42	.9851
#1	1.146	-.0002	.6543	.0012	-.0005	.0004	.0105
#2	1.150	-.0004	.6525	.0012	-.0009	.0000	.0106
#3	1.147	-.0001	.6563	.0013	-.0009	.0002	.0104

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2774.9	6861.3	53696.	5524.7
Stddev	5.4	5.8	229.	22.4
%RSD	.19424	.08446	.42715	.40562
#1	2773.9	6860.3	53583.	5549.5
#2	2770.1	6856.0	53544.	5518.6
#3	2780.8	6867.5	53960.	5505.9

Zoom In Zoom Out

Sample Name: FA33822-5F Acquired: 5/12/2016 15:06:10 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	.3429	.0023	.0212	-.0001	153.0	-.0001	-.0001	.0020	.0015
Stddev	.0003	.0072	.0003	.0001	.0001	2.4	.0001	.0001	.0002	.0002
%RSD	227.1	2.110	11.87	.4126	62.26	1.558	45.56	87.38	11.65	10.57
#1	.0002	.3399	.0023	.0211	.0000	150.3	-.0001	-.0001	.0018	.0013
#2	-.0003	.3376	.0025	.0213	-.0002	154.8	-.0002	.0000	.0022	.0014
#3	-.0003	.3511	.0020	.0212	-.0001	153.9	-.0001	-.0002	.0020	.0016

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	3.865	4.008	4.015	.0388	.0009	37.97	.0028	.0041	.0009	.0002
Stddev	.008	.022	.030	.0000	.0001	.14	.0001	.0007	.0002	.0004
%RSD	.1962	.5435	.7585	.0563	14.71	.3671	2.126	17.46	22.58	172.9
#1	3.862	4.033	3.999	.0388	.0011	37.81	.0028	.0040	.0007	-.0002
#2	3.874	3.993	4.050	.0388	.0008	38.02	.0029	.0049	.0012	.0004
#3	3.860	3.997	3.996	.0388	.0009	38.08	.0029	.0034	.0009	.0004

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	3.284	-.0002	1.311	.0153	-.0011	.0015	.1079
Stddev	.011	.0002	.004	.0007	.0003	.0001	.0005
%RSD	.3302	120.7	.3104	4.572	28.81	9.234	.4629
#1	3.271	.0001	1.306	.0153	-.0012	.0016	.1082
#2	3.292	-.0002	1.315	.0160	-.0007	.0015	.1082
#3	3.287	-.0003	1.311	.0146	-.0012	.0014	.1073

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2692.7	6801.9	52837.	5534.8
Stddev	4.4	15.5	302.	45.2
%RSD	.16351	.22850	.57190	.81648
#1	2687.6	6787.7	52505.	5575.8
#2	2694.9	6799.5	53095.	5486.3
#3	2695.5	6818.5	52912.	5542.2

Zoom In Zoom Out

Sample Name: FA33822-8F Acquired: 5/12/2016 15:10:23 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0003	.0502	.0012	.0097	-.0001	68.61	-.0001	-.0002	.0003	.0014
Stddev	.0003	.0130	.0009	.0002	.0000	.24	.0000	.0001	.0002	.0000
%RSD	136.6	25.86	76.71	1.680	58.21	.3478	35.35	35.20	53.87	2.541
#1	-.0001	.0482	.0002	.0099	.0000	68.87	-.0001	-.0002	.0005	.0013
#2	.0004	.0640	.0015	.0096	-.0001	68.55	-.0001	-.0002	.0002	.0014
#3	.0005	.0383	.0019	.0096	.0000	68.40	-.0002	-.0001	.0003	.0014

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	.1355	2.273	2.696	.0114	.0008	35.66	.0004	-.0001	.0001	.0012
Stddev	.0036	.012	.045	.0000	.0001	.13	.0001	.0007	.0005	.0011
%RSD	2.685	.5313	1.662	.3542	14.33	.3508	17.39	757.8	816.5	89.30
#1	.1384	2.260	2.686	.0115	.0007	35.80	.0004	.0003	-.0005	.0005
#2	.1366	2.283	2.745	.0114	.0009	35.64	.0004	.0003	.0003	.0007
#3	.1314	2.275	2.657	.0114	.0007	35.55	.0003	-.0009	.0004	.0024

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	1.520	-.0001	.6208	.0023	-.0009	.0009	.0150
Stddev	.001	.0001	.0012	.0000	.0009	.0001	.0001
%RSD	.0486	189.7	.1935	1.462	99.95	14.80	.4012
#1	1.521	.0001	.6221	.0023	-.0011	.0009	.0150
#2	1.519	-.0002	.6207	.0023	-.0016	.0009	.0151
#3	1.520	-.0001	.6197	.0022	.0001	.0007	.0150

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2768.5	6883.5	53396.	5490.1
Stddev	1.6	12.0	97.	13.8
%RSD	.05803	.17501	.18079	.25186
#1	2767.1	6877.4	53397.	5506.1
#2	2768.0	6875.7	53298.	5482.8
#3	2770.3	6897.4	53491.	5481.5

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/12/2016 15:14:30 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2516	39.53	1.983	1.991	1.989	39.75	2.021	2.004	1.995	2.001
Stddev	.0002	.15	.002	.008	.006	.12	.002	.001	.004	.007
%RSD	.0616	.3851	.1175	.3946	.3186	.3010	.0833	.0524	.1907	.3387
#1	.2517	39.56	1.985	1.993	1.990	39.82	2.020	2.002	1.997	2.008
#2	.2514	39.37	1.981	1.983	1.982	39.62	2.020	2.004	1.997	1.995
#3	.2517	39.67	1.984	1.998	1.994	39.82	2.023	2.004	1.990	2.001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.52	40.32	39.80	2.066	2.019	39.88	2.003	1.996	1.988	1.989
Stddev	.15	.04	.08	.004	.005	.16	.001	.004	.003	.003
%RSD	.3725	.1084	.1910	.1889	.2376	.3888	.0475	.2083	.1467	.1471
#1	41.38	40.32	39.75	2.065	2.015	39.97	2.002	1.999	1.991	1.986
#2	41.49	40.28	39.89	2.070	2.018	39.70	2.002	1.997	1.987	1.989
#3	41.68	40.36	39.76	2.062	2.024	39.97	2.004	1.991	1.986	1.992
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.733	2.034	2.020	2.087	2.009	2.025	2.021
Stddev	.003	.002	.008	.002	.003	.003	.002
%RSD	.1669	.1183	.4092	.0897	.1534	.1290	.0987
#1	1.736	2.032	2.019	2.087	2.006	2.028	2.019
#2	1.730	2.036	2.012	2.089	2.012	2.024	2.021
#3	1.734	2.036	2.029	2.085	2.009	2.023	2.023
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/12/2016 15:14:30 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2572.7	6767.1	52905.	5478.8
Stddev	1.9	10.4	238.	67.6
%RSD	.07283	.15346	.44997	1.2335
#1	2573.9	6779.1	52736.	5520.2
#2	2570.6	6761.6	52801.	5400.8
#3	2573.7	6760.6	53177.	5515.3

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/12/2016 15:18:27 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0058	.0017	.0002	.0001	.0048	.0002	.0002	.0002
Stddev	.0003	.0121	.0003	.0001	.0001	.0030	.0001	.0000	.0000
%RSD	226.6	206.4	17.19	37.18	82.78	62.50	44.76	19.69	20.53
#1	-.0001	-.0079	.0020	.0003	.0000	.0023	.0003	.0003	.0002
#2	.0002	.0105	.0014	.0002	.0002	.0040	.0003	.0002	.0002
#3	-.0004	.0149	.0018	.0002	.0001	.0081	.0001	.0002	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0286	.0318	.0084	.0003	F.0025	.0201	.0003	-.0007
Stddev	.0002	.0035	.0154	.0143	.0000	.0006	.0127	.0002	.0004
%RSD	4269.	12.08	48.32	170.5	6.673	24.95	63.27	60.83	55.29
#1	.0002	.0326	.0140	.0151	.0003	.0032	.0271	.0002	-.0006
#2	-.0001	.0268	.0408	-.0080	.0002	.0024	.0278	.0006	-.0011
#3	-.0001	.0264	.0405	.0180	.0003	.0020	.0054	.0002	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0017	.0006	.0008	.0005	.0002	.0016	.0003	.0003	.0001
Stddev	.0002	.0005	.0004	.0001	.0001	.0001	.0005	.0002	.0001
%RSD	11.79	87.50	48.27	25.35	41.55	5.957	139.7	51.54	75.17
#1	.0015	.0000	.0009	.0004	.0001	.0017	.0009	.0005	.0003
#2	.0019	.0010	.0012	.0006	.0003	.0015	.0000	.0002	.0001
#3	.0017	.0006	.0004	.0005	.0002	.0016	.0001	.0003	.0000
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/12/2016 15:18:27 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3076.6	7183.8	56528.	5550.6
Stddev	2.3	4.3	73.	10.0
%RSD	.07443	.05934	.12935	.18010
#1	3077.3	7184.0	56608.	5552.9
#2	3074.1	7188.0	56465.	5539.6
#3	3078.5	7179.5	56511.	5559.2

SGS ACCUTEST FA33720

Zoom In Zoom Out

Sample Name: FA33852-1 Acquired: 5/12/2016 15:22:36 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0002	6.210	.0338	.0379	.0000	145.9	-.0001	.0275	.0207
Stddev	.0007	.424	.0002	.0028	.000	10.0	.0000	.0001	.0002
%RSD	391.9	6.828	.5026	7.482	145.2	6.845	58.18	.3278	.8186
#1	.0001	5.720	.0336	.0347	-.0001	134.3	.0000	.0275	.0207
#2	.0009	6.448	.0339	.0394	-.0001	151.8	-.0001	.0274	.0208
#3	-.0004	6.461	.0337	.0397	.0000	151.5	.0000	.0276	.0205

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.1121	1.421	F214.8	41.64	.5389	.0194	F723.2	.1672	.0028
Stddev	.0003	.095	12.7	2.77	.0008	.0002	20.5	.0004	.0001
%RSD	.2621	6.655	5.931	6.656	.1441	1.244	2.840	.2318	3.992
#1	.1124	1.312	200.1	38.44	.5393	.0197	700.2	.1668	.0029
#2	.1119	1.478	222.8	43.28	.5380	.0193	739.7	.1672	.0027
#3	.1119	1.473	221.5	43.21	.5394	.0193	729.8	.1676	.0028

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0177	.0016	5.838	.0038	.1355	.0075	-.0015	.0169	.5161
Stddev	.0001	.0011	.007	.0001	.0094	.0000	.0008	.0003	.0004
%RSD	.6958	72.25	.1227	3.763	6.965	.6142	53.55	1.707	.0725
#1	.0179	.0005	5.840	.0036	.1246	.0074	-.0024	.0165	.5165
#2	.0176	.0014	5.830	.0039	.1410	.0075	-.0009	.0170	.5159
#3	.0177	.0027	5.844	.0038	.1409	.0075	-.0011	.0171	.5158

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2148.4	5881.3	44012.	5292.1
Stddev	3.3	14.2	153.	245.2
%RSD	.15475	.24139	.34805	4.6324
#1	2148.4	5864.9	43927.	5575.1
#2	2145.1	5889.1	44189.	5154.6
#3	2151.8	5889.9	43920.	5146.6

Zoom In Zoom Out

Sample Name: MP30350-MB1 Acquired: 5/12/2016 15:26:49 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0105	.0008	-.0002	-.0001	.0212	-.0001	-.0001	-.0001	.0000
Stddev	.0002	.0080	.0004	.0001	.0001	.0088	.0000	.0000	.0002	.000
%RSD	54.45	76.30	51.63	30.43	69.92	41.33	25.98	50.23	147.2	1047.
#1	-.0005	.0070	.0006	-.0002	-.0002	.0115	-.0001	-.0001	-.0002	-.0004
#2	-.0002	.0198	.0005	-.0002	.0000	.0237	.0000	-.0001	-.0003	.0002
#3	-.0002	.0049	.0013	-.0003	-.0001	.0285	.0000	-.0001	.0001	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0008	.2466	.0040	.0001	.0002	.3971	-.0003	-.0001	.0011	-.0017
Stddev	.0002	.0070	.0278	.0000	.0000	.0298	.0001	.0002	.0009	.0011
%RSD	23.51	2.832	688.4	27.98	20.51	7.501	23.64	158.1	78.88	68.07
#1	-.0007	.2515	-.0154	.0001	.0002	.3628	-.0002	-.0003	.0021	-.0026
#2	-.0010	.2386	.0359	.0001	.0002	.4164	-.0004	-.0001	.0007	-.0004
#3	-.0007	.2497	-.0084	.0001	.0001	.4121	-.0003	.0001	.0005	-.0020
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0258	-.0001	.0000	.0002	-.0006	-.0001	-.0001
Stddev	.0031	.0001	.000	.0000	.0000	.0002	.0000
%RSD	11.87	122.3	167.1	11.26	6.375	151.1	30.23
#1	.0289	.0000	-.0001	.0002	-.0005	-.0003	-.0001
#2	.0258	-.0001	.0000	.0002	-.0006	-.0003	-.0001
#3	.0228	-.0002	.0000	.0002	-.0005	.0001	-.0001
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP30350-MB1 Acquired: 5/12/2016 15:26:49 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3069.2	7232.4	56988.	5596.4
Stddev	6.7	1.3	94.	26.0
%RSD	.21983	.01743	.16523	.46436
#1	3064.7	7233.6	57062.	5575.1
#2	3076.9	7232.5	57020.	5625.3
#3	3065.9	7231.1	56882.	5588.6

Zoom In Zoom Out

Sample Name: MP30350-B1 Acquired: 5/12/2016 15:30:58 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0489	27.64	1.979	2.117	.0544	26.24	.0516	.5137	.2076	.2633
Stddev	.0002	.07	.004	.001	.0002	.09	.0001	.0006	.0008	.0016
%RSD	.4195	.2521	.1920	.0372	.3458	.3283	.1114	.1202	.3871	.6039
#1	.0487	27.56	1.976	2.116	.0542	26.14	.0516	.5131	.2075	.2644
#2	.0491	27.67	1.977	2.117	.0543	26.28	.0516	.5138	.2069	.2641
#3	.0487	27.68	1.983	2.117	.0546	26.30	.0517	.5143	.2085	.2615
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	26.61	26.10	26.08	.5322	.4916	25.92	.5175	.4979	.5023	2.006
Stddev	.09	.05	.11	.0008	.0008	.07	.0007	.0007	.0005	.002
%RSD	.3499	.2083	.4219	.1493	.1726	.2536	.1326	.1428	.0900	.1218
#1	26.55	26.04	25.95	.5313	.4906	25.85	.5172	.4972	.5028	2.004
#2	26.72	26.15	26.13	.5325	.4920	25.96	.5171	.4986	.5021	2.007
#3	26.57	26.11	26.15	.5329	.4921	25.97	.5183	.4979	.5020	2.008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0226	.5077	.5135	.5082	1.995	.4891	.5154
Stddev	.0005	.0013	.0010	.0005	.006	.0013	.0007
%RSD	2.164	.2510	.1924	.0894	.3266	.2599	.1348
#1	.0225	.5072	.5125	.5080	1.988	.4903	.5154
#2	.0231	.5068	.5136	.5078	1.999	.4878	.5147
#3	.0221	.5092	.5145	.5087	1.999	.4890	.5161
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

SGS ACCUTEST FA33720

Zoom In Zoom Out

Sample Name: MP30350-B1 Acquired: 5/12/2016 15:30:58 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2736.7	6948.1	53932.	5472.7
Stddev	2.0	10.0	235.	57.2
%RSD	.07142	.14416	.43604	1.0458
#1	2734.5	6940.3	54192.	5530.6
#2	2738.2	6959.4	53869.	5416.2
#3	2737.4	6944.8	53735.	5471.5

Zoom In Zoom Out

Sample Name: FA33701-1 Acquired: 5/12/2016 15:34:55 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0002	.0117	-.0001	.0086	-.0001	81.40	.0005	.0003	.0002
Stddev	.0004	.0015	.0006	.0001	.0000	.13	.0000	.0001	.0002
%RSD	178.7	12.74	1149.	.7964	20.57	.1655	9.034	20.11	87.34
#1	.0006	.0101	-.0007	.0085	-.0001	81.37	.0005	.0004	.0003
#2	.0001	.0122	.0003	.0087	-.0001	81.55	.0004	.0003	.0004
#3	-.0001	.0130	.0002	.0086	-.0001	81.29	.0005	.0003	.0000

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0001	.0158	.5626	1.186	.0303	-.0001	F149.9	.0006	-.0004
Stddev	.0002	.0032	.0106	.029	.0001	.0002	2.1	.0000	.0005
%RSD	367.5	20.02	1.881	2.477	.3013	119.5	1.422	7.786	116.8
#1	.0003	.0184	.5530	1.189	.0304	.0000	152.0	.0006	.0001
#2	-.0001	.0168	.5609	1.155	.0302	-.0003	147.8	.0006	-.0007
#3	.0000	.0123	.5739	1.214	.0304	-.0001	150.0	.0007	-.0006

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0006	.0016	.1969	.0000	.0645	.0019	.0049	.0005	.0014
Stddev	.0017	.0008	.0030	.0001	.0001	.0000	.0006	.0000	.0000
%RSD	267.1	50.20	1.535	391.6	.1550	1.162	11.97	4.524	2.637
#1	.0026	.0024	.1991	.0002	.0644	.0018	.0056	.0005	.0013
#2	-.0001	.0008	.1935	-.0001	.0645	.0019	.0048	.0005	.0014
#3	-.0005	.0015	.1982	.0001	.0645	.0019	.0045	.0005	.0014

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2617.8	6682.6	51685.	5427.5
Stddev	6.7	23.4	195.	35.4
%RSD	.25725	.34986	.37777	.65191
#1	2613.8	6656.6	51465.	5401.6
#2	2625.5	6701.7	51839.	5413.1
#3	2613.9	6689.6	51751.	5467.8

Zoom In Zoom Out

Sample Name: MP30350-D1 Acquired: 5/12/2016 15:39:11 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_2243)	(In2306)
Avg	-.0001	.0138	.0005	.0084	-.0001	80.16	.0004	.0002	.0003
Stddev	.0001	.0050	.0005	.0001	.0001	.41	.0000	.0001	.0004
%RSD	166.1	36.13	116.6	1.722	74.41	.5078	1.768	32.71	116.9
#1	.0000	.0159	.0001	.0084	-.0002	79.75	.0004	.0003	.0007
#2	.0000	.0173	.0002	.0086	.0000	80.56	.0004	.0001	.0001
#3	-.0002	.0081	.0011	.0083	-.0001	80.17	.0004	.0003	.0001

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0002	.0052	.4910	1.171	.0297	-.0004	F146.5	.0005	-.0006
Stddev	.0002	.0014	.0081	.007	.0001	.0000	1.7	.0001	.0004
%RSD	72.26	26.53	1.651	.5766	.2733	10.45	1.169	23.66	63.08
#1	.0001	.0063	.4963	1.175	.0298	-.0004	147.8	.0004	-.0005
#2	.0002	.0057	.4817	1.175	.0296	-.0004	147.2	.0007	-.0003
#3	.0004	.0037	.4951	1.163	.0296	-.0004	144.6	.0005	-.0011

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0002	.0004	.1898	-.0001	.0642	.0015	.0017	.0005	.0014
Stddev	.0004	.0005	.0037	.0003	.0004	.0000	.0005	.0003	.0001
%RSD	226.2	130.4	1.974	220.8	.6069	1.754	29.22	52.03	6.351
#1	-.0003	.0004	.1885	-.0003	.0638	.0015	.0022	.0009	.0014
#2	.0004	-.0001	.1941	-.0002	.0646	.0014	.0012	.0003	.0013
#3	.0003	.0008	.1870	.0002	.0641	.0015	.0019	.0005	.0015

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2621.8	6724.6	51741.	5415.7
Stddev	9.7	15.5	127.	55.3
%RSD	.36817	.23087	.24529	1.0216
#1	2626.5	6727.7	51595.	5445.3
#2	2628.1	6738.2	51825.	5351.8
#3	2610.7	6707.7	51802.	5449.8

Zoom In Zoom Out

Sample Name: MP30350-SD1 Acquired: 5/12/2016 15:43:28 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0007	.0280	.0000	.0089	-.0005	85.33	.0003	-.0002	-.0011	-.0015
Stddev	.0002	.0386	.003	.0002	.0000	.11	.0002	.0004	.0010	.0003
%RSD	38.42	137.7	22900.	2.444	9.926	.1277	60.36	191.8	88.60	22.57
#1	.0004	.0481	.0018	.0090	-.0004	85.46	.0002	.0000	-.0013	-.0014
#2	.0009	.0523	.0018	.0090	-.0005	85.25	.0002	.0000	.0000	-.0019
#3	.0006	-.0165	-.0036	.0086	-.0005	85.28	.0005	-.0007	-.0020	-.0012

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	-.0150	.8038	1.263	.0320	-.0013	164.7	.0000	-.0015	-.0040	.0023
Stddev	.0169	.1689	.039	.0003	.0003	.3	.000	.0033	.0043	.0064
%RSD	112.7	21.01	3.067	.9273	26.32	.1949	850.6	216.1	106.4	274.2
#1	-.0166	.6508	1.292	.0322	-.0015	165.1	-.0002	.0000	-.0089	-.0051
#2	-.0310	.9850	1.219	.0317	-.0014	164.4	.0004	-.0053	-.0025	.0056
#3	.0026	.7756	1.277	.0322	-.0009	164.6	-.0003	.0007	-.0007	.0065

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.2087	-.0008	.0682	.0038	.0073	-.0002	.0561
Stddev	.0024	.0010	.0005	.0001	.0024	.0007	.0001
%RSD	1.173	131.6	.7501	3.027	32.18	353.4	.1919
#1	.2067	-.0002	.0679	.0037	.0088	-.0001	.0560
#2	.2079	-.0002	.0688	.0039	.0046	-.0009	.0562
#3	.2114	-.0020	.0680	.0038	.0086	.0004	.0561

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2839.0	6999.0	53876.	5435.9
Stddev	4.1	13.3	128.	16.9
%RSD	.14317	.18945	.23703	.31180
#1	2835.3	6985.0	53775.	5417.2
#2	2843.3	7011.3	54020.	5450.4
#3	2838.3	7000.6	53834.	5440.0

Zoom In Zoom Out

Sample Name: MP30350-S1 Acquired: 5/12/2016 15:47:35 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0503	26.67	2.032	2.082	.0520	102.9	.0516	.5025	.2049
Stddev	.0006	.09	.003	.003	.0001	.3	.0001	.0007	.0005
%RSD	1.140	.3388	.1289	.1380	.2816	.3143	.1152	.1397	.2476
#1	.0507	26.62	2.033	2.083	.0519	102.7	.0516	.5017	.2048
#2	.0506	26.61	2.033	2.079	.0520	102.7	.0515	.5026	.2054
#3	.0497	26.77	2.029	2.084	.0522	103.3	.0516	.5030	.2044

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2600	26.01	26.03	25.68	.5629	.4864	F164.7	.5084	.5066
Stddev	.0020	.05	.09	.18	.0018	.0011	1.4	.0003	.0018
%RSD	.7740	.1834	.3589	.7158	.3114	.2242	.8207	.0546	.3601
#1	.2604	25.98	25.97	25.54	.5631	.4852	164.1	.5082	.5054
#2	.2617	25.98	25.99	25.61	.5645	.4869	163.8	.5082	.5087
#3	.2578	26.06	26.14	25.89	.5610	.4872	166.3	.5087	.5058

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5058	2.068	.1961	.4955	.5518	.5137	1.995	.4891	.5150
Stddev	.0030	.005	.0033	.0009	.0016	.0026	.005	.0007	.0009
%RSD	.5978	.2493	1.670	.1859	.2876	.5106	.2536	.1426	.1767
#1	.5024	2.062	.1977	.4948	.5512	.5141	1.991	.4894	.5140
#2	.5065	2.070	.1923	.4965	.5506	.5161	1.993	.4896	.5151
#3	.5084	2.072	.1982	.4951	.5536	.5109	2.001	.4883	.5158

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2527.2	6723.0	51387.	5497.3
Stddev	3.5	4.4	112.	75.3
%RSD	.13728	.06563	.21885	1.3689
#1	2530.3	6719.5	51395.	5567.7
#2	2523.4	6728.0	51495.	5506.2
#3	2528.0	6721.6	51270.	5418.0

Zoom In Zoom Out

Sample Name: MP30350-S2 Acquired: 5/12/2016 15:51:41 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0508	27.16	2.017	2.110	.0532	104.6	.0515	.5027	.2096
Stddev	.0008	.07	.003	.004	.0002	.2	.0002	.0017	.0051
%RSD	1.595	.2426	.1265	.1743	.3366	.1910	.3060	.3476	2.440
#1	.0500	27.19	2.015	2.114	.0534	104.7	.0514	.5007	.2066
#2	.0509	27.09	2.018	2.107	.0531	104.4	.0517	.5033	.2067
#3	.0516	27.21	2.020	2.108	.0532	104.8	.0515	.5041	.2155

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2659	26.44	26.48	26.19	.5730	.4870	F168.1	.5067	.5085
Stddev	.0063	.03	.07	.13	.0125	.0013	1.1	.0015	.0011
%RSD	2.386	.1129	.2772	.5006	2.181	.2705	.6630	.2877	.2124
#1	.2615	26.46	26.54	26.22	.5654	.4854	169.2	.5053	.5073
#2	.2629	26.40	26.50	26.04	.5661	.4878	168.0	.5068	.5095
#3	.2731	26.44	26.40	26.30	.5874	.4877	167.0	.5082	.5085

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5044	2.048	.1961	.4930	.5631	.5229	2.000	.4992	.5156
Stddev	.0015	.002	.0038	.0011	.0009	.0118	.006	.0116	.0016
%RSD	.2939	.0931	1.932	.2261	.1598	2.254	.2852	2.322	.3153
#1	.5030	2.046	.1950	.4918	.5641	.5151	1.994	.4918	.5138
#2	.5059	2.050	.1929	.4931	.5623	.5170	2.000	.4933	.5159
#3	.5044	2.048	.2003	.4940	.5628	.5364	2.005	.5126	.5170

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2521.9	6714.9	50469.	5395.7
Stddev	10.9	19.9	1029.	14.4
%RSD	.43271	.29692	2.0387	.26614
#1	2533.0	6736.3	51041.	5381.0
#2	2521.6	6711.5	51085.	5396.5
#3	2511.2	6696.8	49281.	5409.6

Zoom In Zoom Out

Sample Name: FA33728-6L Acquired: 5/12/2016 15:55:47 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0000	.4715	.0000	.0075	-.0001	1.390	-.0001	.0000	.0009
Stddev	.0003	.0134	.0003	.0002	.0001	.007	.0000	.0000	.0003
%RSD	850.3	2.847	707.7	3.028	107.5	.5265	20.28	54.04	33.23
#1	.0003	.4815	-.0003	.0075	-.0001	1.398	-.0001	.0000	.0009
#2	-.0001	.4563	.0003	.0073	-.0001	1.387	-.0001	.0000	.0006
#3	-.0002	.4769	.0002	.0078	.0000	1.385	-.0001	.0000	.0012

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0004	.1413	.2461	.1206	.0019	.0002	F145.4	.0002	.0011
Stddev	.0003	.0029	.0168	.0099	.0000	.0002	.5	.0001	.0003
%RSD	80.91	2.076	6.807	8.196	.9071	72.37	.3489	57.17	25.94
#1	.0001	.1442	.2630	.1094	.0019	.0004	145.5	.0004	.0012
#2	.0004	.1412	.2459	.1281	.0019	.0003	145.8	.0003	.0007
#3	.0007	.1384	.2295	.1243	.0019	.0001	144.8	.0001	.0012

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0001	-.0009	.3332	.0001	.0152	.0339	.0028	.0005	.0073
Stddev	.0007	.0008	.0034	.0002	.0001	.0011	.0009	.0002	.0001
%RSD	692.0	87.56	1.035	164.5	.4486	3.328	31.12	32.59	1.113
#1	-.0006	-.0011	.3368	.0003	.0153	.0331	.0038	.0003	.0074
#2	.0008	.0000	.3328	.0000	.0151	.0334	.0024	.0007	.0073
#3	.0000	-.0015	.3299	.0000	.0152	.0352	.0022	.0005	.0072

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2687.5	6838.8	52037.	5453.3
Stddev	4.4	9.4	325.	17.6
%RSD	.16262	.13723	.62479	.32204
#1	2685.5	6830.0	52169.	5437.1
#2	2684.5	6837.8	51667.	5472.0
#3	2692.5	6848.7	52276.	5450.8

Zoom In Zoom Out

Sample Name: FA33666-1L Acquired: 5/12/2016 16:00:02 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0001	.3924	.0003	.0248	-.0001	8.340	.0000	-.0001	.0009
Stddev	.0003	.0035	.0003	.0004	.0000	.021	.000	.0001	.0001
%RSD	467.5	.8969	92.89	1.555	26.94	.2508	55.42	66.71	15.54
#1	.0003	.3894	.0002	.0247	-.0001	8.325	.0000	-.0002	.0010
#2	-.0002	.3963	.0001	.0253	-.0001	8.332	.0000	.0000	.0008
#3	-.0004	.3915	.0006	.0245	-.0001	8.364	-.0001	-.0001	.0011

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0017	.1539	.5258	.3593	.0138	-.0001	F149.8	.0031	.0005
Stddev	.0002	.0020	.0085	.0174	.0000	.0001	.6	.0001	.0001
%RSD	11.03	1.317	1.611	4.837	.1306	177.2	.4277	3.185	17.52
#1	.0016	.1533	.5328	.3689	.0138	.0000	150.3	.0030	.0006
#2	.0018	.1523	.5282	.3392	.0138	.0000	149.1	.0031	.0005
#3	.0015	.1562	.5164	.3697	.0138	-.0002	150.1	.0032	.0004

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0007	-.0001	.3119	.0001	.0171	.0128	.0000	.0007	.0055
Stddev	.0003	.0010	.0016	.0002	.0000	.0003	.001	.0001	.0001
%RSD	50.98	843.2	.5152	151.8	.2174	2.051	2266.	8.159	1.036
#1	.0003	.0003	.3122	.0002	.0171	.0127	.0000	.0007	.0055
#2	.0006	-.0012	.3134	.0003	.0171	.0127	.0005	.0006	.0056
#3	.0010	.0006	.3102	-.0001	.0171	.0131	-.0005	.0007	.0054

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2672.2	6834.1	51711.	5406.2
Stddev	7.4	15.0	180.	34.3
%RSD	.27753	.21910	.34871	.63442
#1	2679.7	6851.4	51525.	5417.2
#2	2671.9	6826.0	51722.	5433.6
#3	2664.9	6825.0	51885.	5367.7

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/12/2016 16:04:18 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2513	39.78	1.956	2.001	2.024	39.81	2.021	2.004	1.987	2.020
Stddev	.0004	.09	.006	.002	.005	.11	.003	.003	.002	.002
%RSD	.1654	.2381	.3240	.0938	.2268	.2747	.1267	.1559	.1179	.1179
#1	.2515	39.85	1.950	2.002	2.029	39.92	2.021	2.002	1.987	2.021
#2	.2508	39.82	1.955	2.002	2.025	39.82	2.019	2.002	1.989	2.017
#3	.2515	39.67	1.963	1.999	2.019	39.70	2.024	2.007	1.984	2.021
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.73	40.72	40.25	2.074	2.015	39.63	1.986	2.005	1.972	1.962
Stddev	.05	.06	.07	.000	.006	.06	.003	.004	.005	.005
%RSD	.1217	.1369	.1844	.0173	.2936	.1603	.1549	.1783	.2392	.2332
#1	41.67	40.79	40.20	2.074	2.009	39.66	1.985	2.006	1.967	1.959
#2	41.75	40.70	40.21	2.074	2.015	39.67	1.983	2.001	1.972	1.959
#3	41.76	40.68	40.33	2.074	2.021	39.56	1.989	2.008	1.977	1.967
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.717	1.999	2.067	2.102	2.018	2.029	2.016
Stddev	.004	.002	.004	.002	.003	.003	.003
%RSD	.2389	.1224	.2133	.0837	.1632	.1367	.1348
#1	1.713	1.999	2.070	2.100	2.016	2.027	2.016
#2	1.718	1.996	2.070	2.103	2.022	2.032	2.013
#3	1.721	2.001	2.062	2.103	2.016	2.027	2.018
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/12/2016 16:04:18 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2574.5	6816.8	52148.	5416.3
Stddev	3.4	8.2	43.	4.1
%RSD	.13191	.12072	.08162	.07480
#1	2574.1	6817.8	52102.	5415.9
#2	2578.1	6824.5	52186.	5412.5
#3	2571.3	6808.1	52155.	5420.6

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/12/2016 16:08:15 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0159	.0017	.0003	.0003	.0084	.0002	.0002	.0003
Stddev	.0002	.0197	.0005	.0001	.0001	.0029	.0001	.0002	.0001
%RSD	79.04	123.5	31.41	38.31	17.51	34.86	50.71	85.17	27.58
#1	.0000	.0386	.0023	.0003	.0003	.0110	.0003	.0004	.0004
#2	.0004	.0055	.0015	.0005	.0004	.0089	.0002	.0002	.0003
#3	.0004	.0037	.0013	.0003	.0003	.0052	.0001	.0000	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0318	.0727	.0125	.0004	F.0025	.0598	.0002	-.0003
Stddev	.0001	.0052	.0162	.0354	.0000	.0006	.0092	.0000	.0004
%RSD	78.28	16.50	22.25	283.0	6.315	22.33	15.35	25.92	124.4
#1	.0001	.0375	.0618	-.0219	.0004	.0031	.0702	.0002	-.0007
#2	.0002	.0307	.0912	.0107	.0003	.0024	.0567	.0001	.0000
#3	.0000	.0272	.0649	.0487	.0004	.0020	.0526	.0002	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0016	-.0004	.0012	.0006	.0004	.0020	.0010	.0002	.0001
Stddev	.0007	.0006	.0003	.0002	.0001	.0001	.0002	.0004	.0000
%RSD	41.80	161.6	20.90	29.66	14.24	4.116	19.63	228.4	39.87
#1	.0023	.0003	.0013	.0008	.0004	.0021	.0010	.0001	.0002
#2	.0016	-.0005	.0010	.0004	.0005	.0019	.0008	-.0001	.0001
#3	.0010	-.0008	.0015	.0005	.0004	.0020	.0011	.0006	.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/12/2016 16:08:15 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3051.0	7166.0	55836.	5515.1
Stddev	3.5	17.2	136.	36.2
%RSD	.11377	.23983	.24439	.65720
#1	3053.6	7183.5	55861.	5545.2
#2	3052.4	7165.5	55958.	5525.1
#3	3047.1	7149.1	55689.	5474.9

SGS ACCUTEST FA33720

Zoom In Zoom Out

Sample Name: FA33681-1 Acquired: 5/12/2016 16:12:26 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0003	.0309	.0000	.0978	.0000	12.43	.0002	.0019	.0001
Stddev	.0001	.0103	.0005	.0002	.000	.02	.0000	.0001	.0001
%RSD	25.29	33.32	1648.	.2470	273.5	.1750	20.73	4.544	114.1
#1	-.0004	.0200	-.0003	.0976	-.0001	12.40	.0003	.0019	.0000
#2	-.0002	.0323	.0006	.0977	.0001	12.43	.0002	.0019	.0003
#3	-.0002	.0404	-.0002	.0980	-.0001	12.45	.0002	.0018	.0000

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0259	.2960	.8255	.5004	.1409	.0005	F152.4	.0110	.0011
Stddev	.0001	.0027	.0341	.0004	.0005	.0001	1.2	.0000	.0002
%RSD	.2593	.9019	4.126	.0880	.3421	25.98	.7558	.1689	20.63
#1	.0260	.2930	.8455	.5005	.1415	.0006	152.5	.0110	.0012
#2	.0259	.2973	.7861	.4999	.1406	.0004	153.4	.0110	.0012
#3	.0259	.2978	.8448	.5008	.1407	.0004	151.1	.0110	.0008

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0059	.0007	.1062	.0003	.0235	.0012	.0001	.0001	.9353
Stddev	.0006	.0014	.0000	.0001	.0002	.0001	.0006	.0002	.0013
%RSD	9.626	210.1	.0397	28.04	.7129	5.752	460.0	252.8	.1433
#1	.0055	.0017	.1062	.0003	.0234	.0012	.0008	.0002	.9337
#2	.0066	.0012	.1063	.0004	.0234	.0012	-.0002	.0000	.9359
#3	.0056	-.0009	.1063	.0002	.0237	.0013	-.0002	.0000	.9362

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2665.9	6762.3	51891.	5496.7
Stddev	3.6	9.0	32.	52.0
%RSD	.13571	.13357	.06201	.94585
#1	2669.8	6772.2	51926.	5532.9
#2	2662.7	6754.4	51863.	5437.1
#3	2665.2	6760.4	51883.	5520.0

Zoom In Zoom Out

Sample Name: FA33681-2 Acquired: 5/12/2016 16:16:42 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0003	.0427	.0001	.1002	.0000	11.91	.0001	.0021	.0004
Stddev	.0001	.0082	.0005	.0003	.000	.06	.0000	.0001	.0003
%RSD	21.09	19.18	398.6	.2828	139.1	.5239	9.155	3.332	75.72
#1	-.0003	.0345	.0005	.1000	.0000	11.85	.0001	.0021	.0001
#2	-.0003	.0426	-.0005	.1001	.0000	11.90	.0001	.0020	.0004
#3	-.0004	.0509	.0004	.1005	.0000	11.97	.0001	.0020	.0006

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0200	.1933	.9057	.5527	.1256	.0002	F151.7	.0126	.0015
Stddev	.0002	.0016	.0266	.0126	.0002	.0000	1.0	.0000	.0007
%RSD	1.149	.8138	2.933	2.287	.1874	24.87	.6687	.3411	47.80
#1	.0202	.1949	.8905	.5419	.1255	.0002	152.8	.0126	.0023
#2	.0201	.1933	.9363	.5496	.1255	.0001	151.5	.0126	.0014
#3	.0198	.1918	.8901	.5666	.1259	.0002	150.8	.0126	.0008

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0071	.0006	.1222	.0000	.0225	.0007	-.0002	.0001	1.079
Stddev	.0008	.0008	.0021	.000	.0001	.0001	.0004	.0002	.002
%RSD	11.53	126.9	1.730	1369.	.5634	7.707	229.4	175.6	.1759
#1	.0067	.0011	.1218	.0000	.0227	.0008	-.0007	.0003	1.078
#2	.0080	-.0003	.1244	-.0002	.0224	.0008	-.0001	-.0001	1.077
#3	.0066	.0010	.1202	.0001	.0226	.0007	.0002	.0001	1.081

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2674.6	6795.9	51784.	5379.4
Stddev	4.4	15.3	63.	8.7
%RSD	.16335	.22489	.12240	.16224
#1	2676.7	6806.4	51844.	5385.6
#2	2677.5	6802.8	51790.	5369.5
#3	2669.5	6778.3	51718.	5383.3

Zoom In Zoom Out

Sample Name: FA33756-2L Acquired: 5/12/2016 16:20:57 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0000	.0734	.0000	.0140	-.0001	7.568	.0001	.0007	.0017
Stddev	.000	.0100	.000	.0002	.0001	.045	.0000	.0000	.0002
%RSD	830.4	13.63	1215.	1.177	79.81	.5951	51.72	3.983	10.12
#1	.0002	.0619	-.0002	.0140	-.0002	7.516	.0000	.0007	.0019
#2	-.0003	.0781	-.0004	.0142	-.0001	7.598	.0001	.0006	.0015
#3	.0000	.0802	.0005	.0138	-.0001	7.591	.0001	.0007	.0017

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0129	.1127	.5470	.7071	.0612	.0782	F158.9	.0101	-.0007
Stddev	.0003	.0039	.0146	.0250	.0001	.0002	3.5	.0001	.0002
%RSD	2.522	3.464	2.665	3.543	.2147	.2698	2.204	1.262	28.73
#1	.0127	.1088	.5411	.6905	.0611	.0780	161.5	.0102	-.0008
#2	.0132	.1128	.5636	.6948	.0613	.0784	160.2	.0099	-.0009
#3	.0126	.1166	.5363	.7359	.0613	.0781	154.9	.0101	-.0005

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0022	-.0014	.2735	.0003	.0683	.0007	-.0013	.0002	.0797
Stddev	.0016	.0016	.0009	.0001	.0003	.0002	.0007	.0002	.0002
%RSD	75.28	117.7	.3181	22.88	.4718	23.99	59.38	96.74	.1979
#1	.0037	.0005	.2731	.0004	.0679	.0008	-.0018	.0001	.0795
#2	.0005	-.0023	.2730	.0002	.0685	.0005	-.0004	.0004	.0797
#3	.0023	-.0023	.2745	.0003	.0684	.0009	-.0016	.0001	.0798

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2665.6	6791.2	51565.	5341.8
Stddev	2.5	8.0	360.	9.3
%RSD	.09203	.11758	.69781	.17435
#1	2668.4	6800.1	51930.	5352.1
#2	2664.3	6788.6	51211.	5339.6
#3	2664.1	6784.8	51554.	5333.8

Zoom In Zoom Out

Sample Name: FA33756-3L Acquired: 5/12/2016 16:25:10 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0000	.1979	.0005	.0158	.0000	4.829	.0000	.0000	.0031
Stddev	.0003	.0091	.0002	.0000	.000	.014	.000	.000	.0003
%RSD	818.3	4.621	45.89	.2788	99.83	.2806	116.1	78.18	8.290
#1	.0003	.1902	.0003	.0158	-.0001	4.844	.0000	.0000	.0034
#2	.0001	.1955	.0008	.0158	.0000	4.821	.0000	.0000	.0029
#3	-.0003	.2080	.0005	.0157	.0000	4.821	-.0001	.0000	.0030

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0154	.0451	.4991	.3401	.0151	.0013	F143.0	.0073	-.0004
Stddev	.0002	.0017	.0134	.0171	.0000	.0000	1.2	.0001	.0004
%RSD	1.526	3.796	2.678	5.027	.2387	2.757	.8107	1.048	113.3
#1	.0153	.0452	.4937	.3470	.0151	.0013	144.3	.0073	-.0001
#2	.0153	.0468	.4892	.3526	.0151	.0013	142.1	.0074	-.0009
#3	.0157	.0433	.5143	.3206	.0150	.0013	142.7	.0072	-.0001

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0022	-.0006	.8604	.0000	.0157	.0090	-.0016	.0011	.0881
Stddev	.0011	.0006	.0028	.0001	.0000	.0003	.0006	.0003	.0002
%RSD	51.61	93.43	.3209	162.7	.2562	2.808	36.44	29.08	.2216
#1	.0027	-.0006	.8598	.0001	.0158	.0090	-.0012	.0014	.0883
#2	.0009	-.0011	.8580	.0001	.0157	.0092	-.0022	.0008	.0880
#3	.0030	.0000	.8634	.0000	.0157	.0087	-.0012	.0011	.0880

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2676.8	6814.6	51758.	5398.0
Stddev	6.2	19.3	72.	36.7
%RSD	.23047	.28289	.13901	.68022
#1	2669.9	6793.5	51675.	5355.6
#2	2682.0	6819.3	51794.	5418.3
#3	2678.4	6831.2	51804.	5420.0

Zoom In Zoom Out

Sample Name: FA33756-4L Acquired: 5/12/2016 16:29:25 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0000	.0326	.0000	.0052	-.0001	.2809	.0003	.0002	.0022
Stddev	.000	.0168	.0003	.0001	.0001	.0054	.0000	.0000	.0001
%RSD	1175.	51.60	1966.	2.525	114.4	1.911	12.23	17.16	6.898
#1	.0001	.0491	-.0002	.0052	-.0002	.2802	.0002	.0002	.0023
#2	-.0004	.0154	-.0002	.0051	.0000	.2760	.0003	.0001	.0021
#3	.0002	.0333	.0004	.0053	-.0002	.2866	.0002	.0002	.0021

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0081	.8291	.2358	.0473	.0085	.0006	F159.0	.0099	.0009
Stddev	.0002	.0022	.0115	.0095	.0000	.0001	1.2	.0001	.0006
%RSD	1.991	.2629	4.866	20.17	.4509	23.23	.7821	.5059	66.90
#1	.0083	.8271	.2488	.0548	.0085	.0006	159.9	.0098	.0012
#2	.0080	.8288	.2311	.0504	.0085	.0008	159.6	.0099	.0012
#3	.0082	.8314	.2273	.0366	.0085	.0005	157.6	.0099	.0002

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0010	-.0008	.0786	.0000	.0009	.0001	-.0004	-.0001	.0129
Stddev	.0007	.0007	.0035	.000	.0001	.0000	.0003	.0001	.0001
%RSD	74.94	93.02	4.396	998.4	7.888	39.03	83.92	188.1	.8817
#1	.0006	-.0006	.0752	.0000	.0009	.0001	-.0007	-.0001	.0130
#2	.0019	-.0002	.0786	.0000	.0009	.0001	-.0003	-.0002	.0129
#3	.0006	-.0016	.0821	.0000	.0010	.0000	-.0001	.0000	.0128

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2667.7	6762.6	51590.	5436.9
Stddev	3.5	4.9	255.	16.2
%RSD	.13164	.07309	.49336	.29887
#1	2671.6	6768.1	51505.	5419.0
#2	2664.7	6761.0	51876.	5440.9
#3	2666.8	6758.7	51388.	5450.7

Zoom In Zoom Out

Sample Name: FA33756-5L Acquired: 5/12/2016 16:33:41 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0000	.1381	.0002	.0781	.0001	.6093	.0024	.0062	.0027
Stddev	.0004	.0073	.0002	.0003	.0000	.0034	.0000	.0000	.0000
%RSD	2643.	5.256	138.6	.4213	37.72	.5557	1.845	.6584	1.876
#1	-.0004	.1370	.0003	.0785	.0002	.6105	.0025	.0062	.0027
#2	.0003	.1314	.0004	.0781	.0001	.6120	.0024	.0062	.0027
#3	.0001	.1458	-.0001	.0778	.0002	.6055	.0024	.0061	.0026

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0921	.6328	.2986	.1334	.0899	.0000	F166.0	.0076	.0075
Stddev	.0007	.0027	.0244	.0237	.0002	.0001	2.3	.0002	.0001
%RSD	.7229	.4274	8.164	17.77	.2654	253.6	1.414	2.762	.7009
#1	.0927	.6353	.3062	.1154	.0898	.0000	168.7	.0079	.0074
#2	.0914	.6300	.3184	.1245	.0901	.0000	164.9	.0075	.0075
#3	.0921	.6330	.2714	.1602	.0897	.0001	164.3	.0075	.0075

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0008	-.0004	.0784	.0002	.0119	.0002	-.0006	-.0001	.5412
Stddev	.0005	.0013	.0032	.0002	.0000	.0001	.0004	.0003	.0006
%RSD	66.53	297.5	4.052	104.8	.3772	44.35	67.34	417.3	.1022
#1	.0013	.0010	.0782	.0004	.0118	.0001	-.0002	-.0004	.5409
#2	.0009	-.0015	.0753	.0000	.0119	.0002	-.0008	.0001	.5409
#3	.0002	-.0008	.0817	.0001	.0119	.0003	-.0010	.0000	.5419

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2663.7	6794.1	51700.	5435.7
Stddev	6.5	6.6	91.	31.7
%RSD	.24216	.09668	.17613	.58389
#1	2671.2	6797.9	51804.	5399.1
#2	2660.1	6797.9	51636.	5455.9
#3	2659.9	6786.5	51660.	5452.0

Zoom In Zoom Out

Sample Name: FA33756-6L Acquired: 5/12/2016 16:37:57 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0000	.0185	-.0002	.0081	.0000	.4868	-.0001	.0003	.0023
Stddev	.000	.0058	.0002	.0000	.000	.0040	.0000	.0001	.0003
%RSD	2013.	31.47	130.4	.5791	259.9	.8162	33.54	38.39	13.58
#1	-.0002	.0244	.0001	.0081	.0000	.4830	.0000	.0001	.0026
#2	.0002	.0127	-.0002	.0081	-.0001	.4864	.0000	.0003	.0019
#3	-.0001	.0183	-.0004	.0081	.0000	.4909	-.0001	.0003	.0023

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0020	.8099	.2411	.0434	.0056	.0004	F172.1	.0117	.0000
Stddev	.0004	.0091	.0058	.0065	.0000	.0001	3.6	.0000	.001
%RSD	19.94	1.122	2.405	15.00	.2595	22.56	2.080	.3689	10820.
#1	.0024	.8034	.2346	.0508	.0056	.0004	175.8	.0118	.0006
#2	.0017	.8060	.2427	.0386	.0056	.0005	168.7	.0117	-.0005
#3	.0019	.8203	.2459	.0407	.0056	.0003	171.9	.0117	.0000

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0004	-.0007	.0791	.0000	.0017	.0002	-.0012	-.0001	.0222
Stddev	.0007	.0007	.0019	.0002	.0000	.0001	.0009	.0002	.0000
%RSD	180.6	105.4	2.390	4171.	1.006	31.68	69.22	377.2	.1103
#1	.0012	-.0015	.0811	.0002	.0017	.0001	-.0005	-.0002	.0222
#2	.0000	-.0003	.0774	-.0002	.0017	.0003	-.0010	-.0002	.0222
#3	.0000	-.0002	.0787	.0001	.0016	.0002	-.0022	.0002	.0222

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2653.4	6764.5	51132.	5361.5
Stddev	7.0	8.0	41.	79.2
%RSD	.26218	.11771	.08055	1.4766
#1	2648.0	6755.4	51179.	5299.7
#2	2661.2	6768.0	51105.	5450.7
#3	2650.8	6770.1	51111.	5334.0

Zoom In Zoom Out

Sample Name: FA33726-7 Acquired: 5/12/2016 16:42:14 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0001	.0288	.0000	.0070	-.0001	7.915	.0025	.0000	.0003
Stddev	.0002	.0069	.0002	.0003	.0001	.015	.0000	.000	.0001
%RSD	176.1	23.98	363.4	3.655	64.67	.1844	.5476	564.1	41.23
#1	-.0003	.0340	.0002	.0072	-.0001	7.900	.0025	.0000	.0001
#2	.0000	.0315	.0001	.0067	-.0001	7.930	.0025	.0001	.0003
#3	.0000	.0210	-.0001	.0070	.0000	7.917	.0025	-.0001	.0003

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0010	.0028	.3910	.4083	.0040	-.0001	F145.2	.0003	-.0008
Stddev	.0003	.0015	.0290	.0247	.0001	.0001	1.0	.0002	.0007
%RSD	29.80	52.80	7.418	6.043	1.308	46.79	.6731	58.92	83.14
#1	.0013	.0037	.3860	.4229	.0041	-.0001	145.7	.0001	-.0002
#2	.0008	.0011	.4221	.4223	.0041	-.0002	145.9	.0002	-.0007
#3	.0008	.0037	.3648	.3798	.0040	-.0001	144.1	.0004	-.0016

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0007	.0005	.0472	.0000	.0180	.0004	-.0008	-.0001	.0484
Stddev	.0008	.0006	.0017	.0003	.0002	.0001	.0004	.0002	.0002
%RSD	112.3	139.7	3.599	1263.	.9598	18.77	55.15	413.0	.3210
#1	.0016	.0000	.0471	-.0003	.0179	.0005	-.0004	-.0002	.0483
#2	.0000	.0002	.0455	.0002	.0182	.0003	-.0013	-.0001	.0483
#3	.0006	.0012	.0489	.0001	.0180	.0004	-.0007	.0002	.0486

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2682.4	6835.3	52036.	5422.0
Stddev	6.7	10.3	238.	53.0
%RSD	.24922	.15129	.45688	.97695
#1	2675.9	6824.0	52257.	5432.2
#2	2682.0	6844.4	52067.	5364.6
#3	2689.3	6837.5	51785.	5469.1

SGS ACCUTEST FA33720

Zoom In Zoom Out

Sample Name: MP30350-D2 Acquired: 5/12/2016 16:46:29 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0001	.3402	-.0002	.0239	-.0001	8.230	.0000	.0000	.0004
Stddev	.0002	.0079	.0004	.0001	.0000	.018	.000	.000	.0004
%RSD	265.4	2.325	180.7	.2857	19.30	.2224	77.56	197.6	105.4
#1	.0003	.3316	.0000	.0239	-.0002	8.234	.0000	-.0001	.0008
#2	-.0001	.3471	-.0007	.0240	-.0002	8.209	.0000	.0000	.0002
#3	.0000	.3420	.0000	.0238	-.0001	8.245	-.0001	.0000	.0001

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0014	.1344	.4516	.3348	.0129	-.0002	F146.4	.0029	-.0007
Stddev	.0003	.0003	.0331	.0199	.0000	.0001	2.2	.0002	.0002
%RSD	18.42	.2253	7.331	5.957	.2982	26.87	1.507	5.766	34.21
#1	.0011	.1341	.4194	.3284	.0129	-.0002	148.9	.0029	-.0005
#2	.0015	.1347	.4855	.3189	.0129	-.0003	145.4	.0030	-.0009
#3	.0015	.1343	.4499	.3572	.0129	-.0002	144.9	.0027	-.0006

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0002	.0007	.2977	.0003	.0167	.0119	-.0009	.0006	.0043
Stddev	.0003	.0013	.0011	.0002	.0001	.0004	.0012	.0000	.0000
%RSD	150.2	182.4	.3674	83.74	.5725	3.057	126.9	8.899	.4590
#1	.0004	.0001	.2979	.0001	.0166	.0121	-.0009	.0005	.0043
#2	-.0002	.0021	.2965	.0006	.0168	.0121	.0003	.0006	.0043
#3	.0004	-.0002	.2987	.0002	.0167	.0115	-.0021	.0006	.0043

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2678.0	6797.6	52091.	5444.2
Stddev	10.9	12.3	29.	38.6
%RSD	.40814	.18113	.05634	.70967
#1	2688.9	6810.7	52072.	5400.9
#2	2667.0	6786.2	52125.	5456.6
#3	2678.2	6795.9	52077.	5475.1

Zoom In Zoom Out

Sample Name: MP30350-MB2 Acquired: 5/12/2016 16:50:45 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	-.0081	-.0008	.0004	-.0001	.0148	-.0001	.0000	.0001
Stddev	.0002	.0136	.0002	.0000	.0000	.0014	.0000	.000	.0001
%RSD	94.76	169.1	23.86	12.19	19.37	9.524	19.99	104.2	80.79
#1	.0002	.0075	-.0008	.0004	-.0001	.0142	-.0001	-.0001	.0000
#2	.0000	-.0177	-.0010	.0004	-.0001	.0165	-.0001	.0000	.0002
#3	.0003	-.0140	-.0006	.0004	-.0001	.0139	-.0001	.0000	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0244	.1512	.0232	.0003	-.0001	F150.2	-.0001	.0001
Stddev	.0001	.0036	.0087	.0094	.0000	.0001	1.0	.0001	.0008
%RSD	21.13	14.65	5.752	40.34	11.23	119.2	.6579	74.49	770.3
#1	.0003	.0214	.1591	.0186	.0002	.0000	149.8	-.0002	.0000
#2	.0005	.0283	.1419	.0340	.0002	-.0001	149.4	.0000	.0009
#3	.0004	.0234	.1525	.0171	.0003	-.0001	151.3	-.0002	-.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							2.500		
Low Limit							-2.500		

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0001	.0085	.0000	.0000	-.0001	-.0014	-.0002	.0010
Stddev	.0004	.0015	.0002	.000	.0001	.0001	.0005	.0002	.0001
%RSD	154.4	1958.	2.185	1192.	311.3	106.8	34.86	76.41	7.147
#1	.0005	-.0016	.0084	.0003	.0000	.0000	-.0010	-.0005	.0009
#2	-.0002	.0006	.0086	-.0002	.0000	-.0002	-.0011	-.0001	.0011
#3	.0005	.0012	.0083	-.0001	.0002	-.0001	-.0019	-.0001	.0010
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: MP30350-MB2 Acquired: 5/12/2016 16:50:45 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2678.7	6789.6	51771.	5406.8
Stddev	3.2	4.3	99.	17.5
%RSD	.11809	.06300	.19028	.32275
#1	2682.3	6784.7	51734.	5420.1
#2	2677.5	6792.7	51882.	5413.4
#3	2676.4	6791.3	51696.	5387.1

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/12/2016 16:55:04 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2529	40.18	1.964	2.020	2.043	40.13	2.034	2.017	1.996	2.040
Stddev	.0005	.10	.003	.002	.005	.05	.005	.003	.006	.003
%RSD	.1784	.2383	.1606	.0911	.2281	.1342	.2288	.1671	.3166	.1538
#1	.2526	40.15	1.963	2.020	2.039	40.07	2.029	2.014	1.989	2.040
#2	.2534	40.29	1.961	2.021	2.048	40.18	2.034	2.016	2.001	2.044
#3	.2527	40.11	1.967	2.018	2.042	40.12	2.039	2.020	1.999	2.037
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.71	41.25	40.65	2.080	2.026	40.04	1.996	2.013	1.983	1.969
Stddev	.06	.05	.12	.005	.007	.06	.004	.004	.004	.004
%RSD	.1513	.1139	.2902	.2474	.3574	.1380	.1734	.1783	.1908	.1913
#1	41.64	41.30	40.55	2.075	2.019	40.06	1.993	2.011	1.984	1.968
#2	41.75	41.22	40.78	2.085	2.026	40.08	1.995	2.017	1.979	1.966
#3	41.75	41.22	40.63	2.081	2.033	39.97	1.999	2.010	1.986	1.973
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.727	2.007	2.095	2.111	2.024	2.041	2.027
Stddev	.001	.003	.004	.004	.008	.006	.005
%RSD	.0670	.1283	.1714	.2004	.3913	.3090	.2389
#1	1.727	2.007	2.097	2.108	2.019	2.035	2.022
#2	1.725	2.005	2.097	2.116	2.033	2.047	2.027
#3	1.727	2.010	2.091	2.110	2.020	2.041	2.032
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/12/2016 16:55:04 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2565.8	6785.7	52123.	5374.9
Stddev	9.2	25.6	227.	5.0
%RSD	.35898	.37698	.43561	.09288
#1	2576.4	6811.1	52381.	5376.3
#2	2561.1	6785.9	51953.	5379.0
#3	2559.8	6760.0	52034.	5369.3

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/12/2016 16:59:01 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0146	.0015	.0002	.0003	.0086	.0001	.0001	.0002
Stddev	.0000	.0054	.0002	.0001	.0001	.0032	.0001	.0000	.0001
%RSD	15.33	37.34	10.72	32.62	24.43	37.69	54.56	5.684	43.14
#1	.0002	.0086	.0015	.0002	.0004	.0090	.0002	.0001	.0002
#2	.0002	.0160	.0013	.0002	.0003	.0051	.0001	.0001	.0001
#3	.0002	.0192	.0017	.0003	.0003	.0115	.0001	.0001	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0321	.0256	.0118	.0003	F.0025	.0662	.0002	-.0008
Stddev	.0002	.0056	.0248	.0182	.0001	.0006	.0078	.0002	.0000
%RSD	97.39	17.44	96.98	154.1	17.83	24.67	11.74	122.1	4.912
#1	-.0001	.0362	.0334	-.0062	.0004	.0032	.0624	.0002	-.0008
#2	-.0001	.0344	.0455	.0114	.0003	.0024	.0751	-.0001	-.0008
#3	-.0005	.0257	-.0022	.0302	.0003	.0019	.0611	.0003	-.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F.0020	-.0010	.0007	.0002	.0004	F.0020	.0005	.0001	.0001
Stddev	.0005	.0014	.0002	.0000	.0001	.0002	.0002	.0003	.0001
%RSD	23.99	138.5	20.63	12.63	13.84	8.892	40.52	240.8	79.34
#1	.0023	.0004	.0007	.0002	.0005	.0022	.0007	.0004	.0001
#2	.0015	-.0011	.0009	.0002	.0005	.0021	.0007	.0001	.0001
#3	.0023	-.0024	.0006	.0002	.0004	.0018	.0003	-.0001	.0000
Check ?	Chk Fail	Chk Pass	None	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit	.0020					.0020			
Low Limit	-.0020					-.0020			

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/12/2016 16:59:01 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3023.8	7105.2	55689.	5479.2
Stddev	2.2	13.5	333.	44.3
%RSD	.07374	.19027	.59809	.80883
#1	3026.4	7105.4	56070.	5496.5
#2	3022.5	7118.6	55541.	5428.8
#3	3022.7	7091.6	55455.	5512.2

Zoom In Zoom Out

Sample Name: MP30350-B2 Acquired: 5/12/2016 17:03:12 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0499	27.20	2.029	2.107	.0530	25.75	.0519	.5093	.2076
Stddev	.0002	.05	.001	.004	.0002	.02	.0001	.0008	.0009
%RSD	.4791	.1835	.0668	.1944	.3741	.0818	.2524	.1634	.4128
#1	.0500	27.20	2.028	2.112	.0531	25.76	.0519	.5088	.2073
#2	.0501	27.14	2.030	2.106	.0528	25.72	.0518	.5089	.2086
#3	.0496	27.24	2.030	2.104	.0532	25.76	.0520	.5103	.2070
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2606	26.15	26.17	25.25	.5333	.4904	F174.0	.5150	.5082
Stddev	.0008	.06	.06	.10	.0004	.0002	1.1	.0001	.0010
%RSD	.2902	.2366	.2445	.3910	.0835	.0467	.6502	.0285	.2010
#1	.2614	26.19	26.23	25.26	.5338	.4902	173.3	.5149	.5084
#2	.2604	26.08	26.10	25.14	.5333	.4906	175.3	.5148	.5071
#3	.2599	26.16	26.18	25.34	.5329	.4905	173.3	.5151	.5092
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value							25.00		
Range							20.00%		

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5066	2.070	.0119	.5028	.5022	.5097	2.002	.4893	.5234
Stddev	.0009	.000	.0002	.0003	.0005	.0010	.004	.0002	.0009
%RSD	.1697	.0104	1.643	.0606	.0984	.1955	.2080	.0432	.1723
#1	.5069	2.070	.0121	.5031	.5027	.5108	2.000	.4894	.5237
#2	.5072	2.070	.0118	.5027	.5017	.5093	1.999	.4894	.5224
#3	.5056	2.070	.0118	.5025	.5023	.5089	2.007	.4891	.5241
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: MP30350-B2 Acquired: 5/12/2016 17:03:12 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2556.8	6703.7	51638.	5480.3
Stddev	8.7	13.5	203.	23.4
%RSD	.33842	.20210	.39264	.42662
#1	2553.6	6696.6	51751.	5488.3
#2	2566.6	6719.3	51404.	5498.6
#3	2550.2	6695.2	51759.	5453.9

Zoom In Zoom Out

Sample Name: MP30349-MB1 Acquired: 5/12/2016 17:07:17 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0029	-.0004	.0002	-.0001	.0303	.0000	-.0001	.0005	-.0001
Stddev	.0003	.0057	.0005	.0001	.0001	.0009	.000	.0001	.0001	.0001
%RSD	150.3	198.2	126.9	46.99	60.55	2.987	77.85	39.79	26.55	96.55
#1	-.0004	-.0015	-.0006	.0002	-.0002	.0295	.0000	-.0001	.0004	-.0002
#2	.0002	.0093	-.0008	.0001	.0000	.0313	-.0001	-.0002	.0007	.0000
#3	-.0004	.0008	.0002	.0003	-.0001	.0303	.0000	-.0002	.0006	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0330	.0635	.0118	.0002	.0006	.1104	.0002	-.0007	.0013	-.0008
Stddev	.0081	.0304	.0248	.0000	.0002	.0084	.0002	.0000	.0007	.0013
%RSD	24.50	47.88	209.6	16.73	28.85	7.648	87.58	5.647	59.22	151.9
#1	.0414	.0607	-.0027	.0002	.0008	.1124	.0000	-.0007	.0011	-.0020
#2	.0325	.0953	-.0022	.0002	.0005	.1012	.0003	-.0007	.0020	-.0011
#3	.0252	.0346	.0404	.0002	.0005	.1178	.0004	-.0007	.0006	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0088	.0212	.0000	.0009	.0002	-.0001	.0005
Stddev	.0005	.0002	.0001	.0002	.0008	.0001	.0000
%RSD	6.183	.8930	602.8	25.55	356.8	155.6	6.290
#1	.0084	.0214	.0000	.0007	.0011	.0000	.0006
#2	.0094	.0210	-.0001	.0008	.0002	-.0001	.0005
#3	.0087	.0212	.0001	.0012	-.0006	-.0001	.0005
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP30349-MB1 Acquired: 5/12/2016 17:07:17 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3068.4	7152.5	56557.	5478.8
Stddev	2.8	11.0	432.	28.7
%RSD	.09142	.15435	.76444	.52441
#1	3068.9	7152.4	57015.	5492.2
#2	3070.8	7163.6	56501.	5498.5
#3	3065.3	7141.6	56156.	5445.9

Zoom In Zoom Out

Sample Name: MP30349-B1 Acquired: 5/12/2016 17:11:27 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0481	27.44	1.931	2.097	.0529	25.96	.0508	.5061	.2046	.2607
Stddev	.0004	.08	.004	.002	.0001	.06	.0000	.0005	.0004	.0003
%RSD	.7386	.3046	.1840	.0862	.1632	.2444	.0953	.0931	.1859	.0979
#1	.0477	27.50	1.934	2.096	.0529	26.00	.0508	.5066	.2051	.2604
#2	.0482	27.46	1.927	2.099	.0530	25.98	.0508	.5057	.2044	.2608
#3	.0484	27.34	1.932	2.096	.0528	25.89	.0507	.5061	.2044	.2609
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	26.23	26.05	25.73	.5284	.4896	25.89	.5096	.4912	.4847	1.948
Stddev	.05	.03	.03	.0007	.0002	.04	.0006	.0005	.0016	.000
%RSD	.2018	.0977	.1158	.1236	.0477	.1442	.1190	.0998	.3341	.0207
#1	26.18	26.05	25.76	.5279	.4898	25.90	.5100	.4917	.4829	1.948
#2	26.21	26.08	25.70	.5281	.4898	25.92	.5089	.4911	.4851	1.948
#3	26.28	26.03	25.73	.5291	.4894	25.85	.5098	.4907	.4861	1.947
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0089	.5180	.5087	.5092	1.989	.4830	.5065
Stddev	.0001	.0010	.0003	.0007	.003	.0003	.0002
%RSD	.7821	.1911	.0599	.1425	.1544	.0617	.0329
#1	.0089	.5191	.5091	.5084	1.993	.4828	.5063
#2	.0090	.5173	.5086	.5095	1.987	.4834	.5066
#3	.0089	.5175	.5085	.5098	1.988	.4830	.5066
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP30349-B1 Acquired: 5/12/2016 17:11:27 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2721.6	6937.7	53465.	5380.0
Stddev	3.7	5.4	154.	42.8
%RSD	.13585	.07821	.28772	.79588
#1	2722.2	6937.6	53321.	5345.8
#2	2717.6	6932.4	53447.	5428.0
#3	2724.9	6943.2	53627.	5366.1

Zoom In Zoom Out

Sample Name: FA33828-1 Acquired: 5/12/2016 17:15:24 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0029	30.83	.0102	.2018	.0017	88.59	.0067	.0036	.3034	1.448
Stddev	.0002	.08	.0006	.0004	.0000	.19	.0000	.0001	.0013	.006
%RSD	6.826	.2564	6.276	.1761	.2208	.2168	.3997	1.647	.4445	.4110
#1	.0031	30.91	.0107	.2022	.0017	88.81	.0067	.0036	.3029	1.451
#2	.0029	30.80	.0103	.2018	.0017	88.53	.0068	.0037	.3023	1.441
#3	.0027	30.76	.0094	.2015	.0017	88.44	.0067	.0035	.3049	1.452

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	26.50	6.226	8.876	1.354	.0041	3.009	.0243	.1129	.0028	.0069
Stddev	.07	.013	.049	.001	.0001	.015	.0001	.0001	.0010	.0004
%RSD	.2705	.2031	.5569	.0997	3.564	.4964	.5524	.0755	35.13	5.391
#1	26.57	6.231	8.927	1.353	.0042	3.021	.0245	.1130	.0038	.0065
#2	26.43	6.211	8.828	1.355	.0040	3.014	.0243	.1129	.0029	.0072
#3	26.52	6.235	8.872	1.355	.0040	2.992	.0243	.1129	.0018	.0070

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.346	.0237	1.418	.2395	.0006	.0955	.7762
Stddev	.002	.0002	.001	.0002	.0008	.0005	.0015
%RSD	.1763	1.039	.0982	.0863	132.6	.4987	.1872
#1	1.343	.0235	1.420	.2395	.0007	.0951	.7767
#2	1.347	.0236	1.418	.2393	-.0002	.0955	.7774
#3	1.348	.0239	1.417	.2397	.0014	.0960	.7746

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2761.7	8279.2	63395.	6518.2
Stddev	6.5	12.3	104.	40.7
%RSD	.23551	.14800	.16466	.62388
#1	2758.2	8270.1	63475.	6492.7
#2	2757.7	8274.3	63433.	6565.1
#3	2769.2	8293.1	63277.	6496.9

Zoom In Zoom Out

Sample Name: MP30349-D1 Acquired: 5/12/2016 17:19:28 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0036	31.03	.0098	.2053	.0015	77.17	.0075	.0034	.3045	1.376
Stddev	.0001	.05	.0003	.0004	.0001	.10	.0000	.0000	.0006	.002
%RSD	2.188	.1745	3.179	.2090	6.482	.1309	.2033	.3738	.2060	.1463
#1	.0037	30.97	.0094	.2053	.0017	77.08	.0076	.0034	.3052	1.376
#2	.0035	31.04	.0098	.2049	.0015	77.28	.0075	.0034	.3042	1.377
#3	.0036	31.08	.0100	.2058	.0015	77.16	.0075	.0034	.3042	1.373

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	25.65	6.244	9.164	1.441	.0041	2.769	.0255	.1164	.0015	.0069
Stddev	.08	.017	.037	.003	.0001	.001	.0001	.0002	.0007	.0003
%RSD	.2927	.2704	.3991	.2062	2.327	.0454	.4962	.2039	43.71	4.246
#1	25.58	6.231	9.123	1.445	.0040	2.771	.0254	.1167	.0008	.0071
#2	25.65	6.263	9.194	1.440	.0041	2.769	.0255	.1164	.0022	.0066
#3	25.73	6.238	9.175	1.439	.0041	2.768	.0256	.1162	.0016	.0071

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.606	.0254	1.248	.2474	-.0012	.0800	.8727
Stddev	.002	.0002	.001	.0005	.0007	.0004	.0006
%RSD	.1430	.9265	.0508	.1960	60.93	.5460	.0690
#1	1.605	.0253	1.247	.2479	-.0004	.0800	.8720
#2	1.605	.0253	1.249	.2472	-.0019	.0805	.8731
#3	1.609	.0257	1.247	.2470	-.0012	.0796	.8730

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2761.5	8207.4	63378.	6476.2
Stddev	2.8	7.0	238.	62.0
%RSD	.10252	.08494	.37473	.95737
#1	2764.3	8207.5	63105.	6544.2
#2	2758.6	8200.4	63491.	6461.6
#3	2761.7	8214.3	63538.	6422.8

Zoom In Zoom Out

Sample Name: MP30349-SD1 Acquired: 5/12/2016 17:23:31 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0051	36.09	.0143	.2346	.0013	103.1	.0079	.0038	.3599	1.693
Stddev	.0005	.09	.0005	.0005	.0002	.4	.0001	.0002	.0004	.003
%RSD	9.969	.2607	3.254	.2029	17.80	.3395	1.416	4.864	.0988	.1613
#1	.0049	36.07	.0141	.2341	.0011	103.2	.0078	.0040	.3599	1.697
#2	.0047	36.19	.0140	.2348	.0012	103.4	.0080	.0038	.3603	1.692
#3	.0056	36.01	.0149	.2350	.0016	102.7	.0079	.0036	.3595	1.691

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	31.08	7.360	10.50	1.599	.0038	3.739	.0301	.1149	.0034	.0037
Stddev	.12	.069	.16	.004	.0006	.018	.0006	.0036	.0045	.0059
%RSD	.3714	.9400	1.514	.2587	15.42	.4925	2.151	3.115	132.8	158.6
#1	31.20	7.440	10.61	1.603	.0035	3.760	.0307	.1189	.0043	.0105
#2	31.06	7.324	10.56	1.600	.0044	3.733	.0304	.1141	-.0015	.0007
#3	30.97	7.317	10.31	1.595	.0034	3.724	.0294	.1119	.0073	-.0001

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.619	.0286	1.615	.2795	.0054	.1121	.9907
Stddev	.006	.0013	.003	.0006	.0004	.0013	.0010
%RSD	.3436	4.595	.1768	.2301	6.947	1.153	.1011
#1	1.625	.0295	1.619	.2800	.0052	.1135	.9896
#2	1.617	.0292	1.614	.2798	.0052	.1118	.9913
#3	1.614	.0271	1.614	.2788	.0058	.1110	.9913

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2950.1	7392.5	57947.	5871.2
Stddev	8.5	15.0	428.	36.7
%RSD	.28861	.20262	.73777	.62516
#1	2959.6	7409.4	57836.	5889.5
#2	2943.3	7381.1	57587.	5829.0
#3	2947.3	7386.9	58420.	5895.2

SGS ACCUTEST FA33720

Zoom In Zoom Out

Sample Name: MP30349-PS1 Acquired: 5/12/2016 17:27:36 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0431	32.75	.0982	.4341	.0473	92.21	.0510	.0480	.3445	1.518
Stddev	.0001	.07	.0005	.0003	.0002	.24	.0001	.0000	.0015	.003
%RSD	.2252	.2065	.4880	.0793	.3437	.2609	.2476	.0580	.4360	.1750
#1	.0432	32.79	.0977	.4339	.0475	92.38	.0510	.0480	.3436	1.516
#2	.0431	32.67	.0986	.4338	.0472	91.94	.0509	.0479	.3436	1.518
#3	.0430	32.79	.0983	.4345	.0474	92.33	.0511	.0480	.3462	1.521

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	28.56	15.16	13.25	1.364	.0901	12.11	.1120	.1613	.0924	.0944
Stddev	.08	.07	.09	.004	.0002	.03	.0002	.0007	.0005	.0008
%RSD	.2932	.4326	.7125	.2604	.1811	.2234	.1477	.4516	.5318	.8877
#1	28.59	15.23	13.30	1.360	.0899	12.13	.1118	.1604	.0928	.0936
#2	28.46	15.10	13.14	1.363	.0901	12.08	.1119	.1615	.0925	.0952
#3	28.62	15.16	13.30	1.367	.0902	12.12	.1121	.1618	.0918	.0943

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.348	.0652	1.433	.3220	.1009	.1370	.9944
Stddev	.002	.0005	.003	.0009	.0010	.0006	.0003
%RSD	.1136	.7109	.1788	.2841	1.016	.4583	.0301
#1	1.349	.0656	1.434	.3213	.1005	.1367	.9947
#2	1.347	.0647	1.431	.3217	.1002	.1367	.9942
#3	1.349	.0652	1.435	.3231	.1021	.1378	.9942

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2705.3	8154.6	63288.	6461.6
Stddev	2.9	8.0	541.	88.8
%RSD	.10808	.09769	.85485	1.3742
#1	2706.4	8145.7	63723.	6394.8
#2	2707.5	8157.0	63460.	6562.3
#3	2702.0	8161.1	62682.	6427.6

Zoom In Zoom Out

Sample Name: MP30349-S1 Acquired: 5/12/2016 17:31:34 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0437	54.31	1.652	1.982	.0470	99.56	.0481	.4307	.3931	1.254
Stddev	.0001	.19	.001	.007	.0002	.33	.0000	.0003	.0011	.001
%RSD	.3343	.3463	.0631	.3396	.4933	.3277	.0908	.0778	.2925	.0978
#1	.0436	54.46	1.653	1.989	.0473	99.90	.0481	.4311	.3931	1.253
#2	.0439	54.10	1.651	1.975	.0468	99.25	.0480	.4306	.3919	1.253
#3	.0437	54.37	1.653	1.983	.0471	99.52	.0480	.4305	.3942	1.255

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	41.24	27.61	29.22	1.406	.3991	25.07	.4492	.5777	.1907	1.685
Stddev	.10	.06	.12	.002	.0005	.12	.0003	.0016	.0012	.001
%RSD	.2424	.2279	.4029	.1260	.1212	.4630	.0651	.2761	.6091	.0617
#1	41.35	27.65	29.35	1.406	.3996	25.17	.4493	.5762	.1893	1.684
#2	41.21	27.54	29.13	1.404	.3988	24.94	.4495	.5776	.1915	1.686
#3	41.15	27.63	29.18	1.408	.3988	25.10	.4489	.5794	.1912	1.684

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.791	.4268	1.664	.5590	1.958	.4886	1.004
Stddev	.003	.0010	.005	.0012	.001	.0007	.001
%RSD	.1467	.2318	.3024	.2184	.0412	.1514	.1377
#1	1.793	.4270	1.666	.5587	1.959	.4883	1.005
#2	1.791	.4276	1.658	.5580	1.957	.4881	1.005
#3	1.788	.4257	1.667	.5604	1.957	.4895	1.003

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2638.6	8007.2	61936.	6321.4
Stddev	1.3	11.1	279.	43.5
%RSD	.04941	.13915	.45076	.68734
#1	2638.9	7997.1	61615.	6292.7
#2	2639.8	8005.3	62125.	6300.2
#3	2637.2	8019.1	62067.	6371.4

Zoom In Zoom Out

Sample Name: MP30349-S2 Acquired: 5/12/2016 17:35:31 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0454	57.27	1.634	1.981	.0469	96.97	.0484	.4281	.4163	1.819
Stddev	.0002	.22	.002	.004	.0003	.27	.0001	.0004	.0007	.004
%RSD	.5244	.3916	.1091	.1945	.7148	.2798	.2087	.1007	.1755	.2116
#1	.0452	57.44	1.633	1.982	.0472	97.21	.0484	.4278	.4170	1.814
#2	.0453	57.36	1.636	1.985	.0469	97.03	.0486	.4286	.4155	1.822
#3	.0456	57.02	1.634	1.977	.0465	96.68	.0484	.4279	.4165	1.820

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	42.80	28.05	29.71	1.549	.3954	24.96	.4472	.5891	.1829	1.671
Stddev	.01	.06	.13	.004	.0001	.11	.0001	.0003	.0008	.001
%RSD	.0324	.2301	.4224	.2487	.0293	.4300	.0333	.0520	.4615	.0338
#1	42.81	28.12	29.82	1.550	.3953	25.07	.4473	.5894	.1827	1.670
#2	42.79	28.05	29.72	1.545	.3955	24.96	.4474	.5891	.1838	1.671
#3	42.81	27.99	29.57	1.553	.3954	24.86	.4471	.5888	.1822	1.671

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.860	.4243	1.699	.5550	1.964	.4922	1.095
Stddev	.004	.0007	.005	.0009	.003	.0020	.001
%RSD	.2260	.1548	.2988	.1633	.1364	.3987	.0691
#1	1.860	.4243	1.699	.5548	1.963	.4925	1.094
#2	1.865	.4250	1.704	.5541	1.967	.4900	1.096
#3	1.856	.4237	1.694	.5559	1.962	.4939	1.095

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2632.7	8075.9	61910.	6394.5
Stddev	1.9	8.0	305.	58.1
%RSD	.07168	.09855	.49279	.90877
#1	2630.8	8085.0	61775.	6337.2
#2	2632.8	8070.1	62259.	6453.4
#3	2634.5	8072.6	61695.	6392.8

Zoom In Zoom Out

Sample Name: FA33835-1 Acquired: 5/12/2016 17:39:30 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0003	39.05	.0120	.0675	.0021	F675.6	.0002	.0099	.1244
Stddev	.0003	.13	.0002	.0002	.0000	9.8	.0001	.0000	.0002
%RSD	117.0	.3379	1.294	.3372	1.461	1.458	26.06	.1091	.1245
#1	.0006	39.02	.0121	.0677	.0021	670.5	.0003	.0099	.1243
#2	.0002	38.94	.0118	.0673	.0021	669.4	.0002	.0099	.1246
#3	.0000	39.20	.0119	.0676	.0022	687.0	.0002	.0099	.1244

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0165	21.83	.8385	146.6	.0885	.0084	1.671	.0289	.0380
Stddev	.0003	.05	.0203	.1	.0002	.0001	.003	.0001	.0000
%RSD	1.567	.2286	2.423	.0497	.1834	1.327	.1988	.5117	.1002
#1	.0162	21.81	.8152	146.7	.0883	.0083	1.673	.0290	.0380
#2	.0167	21.78	.8524	146.6	.0885	.0085	1.668	.0288	.0381
#3	.0165	21.88	.8479	146.5	.0886	.0083	1.674	.0290	.0380

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0022	.0028	1.826	.0131	1.405	.1801	-.0050	.1791	.0329
Stddev	.0008	.0013	.001	.0001	.004	.0001	.0010	.0003	.0001
%RSD	33.81	48.85	.0560	.6963	.2809	.0285	20.17	.1569	.3439
#1	.0024	.0017	1.824	.0129	1.403	.1801	-.0048	.1794	.0329
#2	.0014	.0023	1.827	.0131	1.403	.1800	-.0041	.1789	.0328
#3	.0029	.0043	1.826	.0131	1.410	.1801	-.0060	.1790	.0330

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2308.4	7822.3	59066.	6353.8
Stddev	6.8	15.9	250.	42.3
%RSD	.29424	.20337	.42301	.66651
#1	2315.7	7833.6	59353.	6324.3
#2	2307.3	7829.2	58947.	6334.8
#3	2302.2	7804.1	58898.	6402.4

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/12/2016 17:43:41 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2524	40.16	1.985	2.024	2.018	40.17	2.034	2.019	2.000	2.026
Stddev	.0001	.06	.003	.002	.002	.06	.001	.000	.004	.003
%RSD	.0393	.1370	.1671	.1194	.0958	.1522	.0400	.0221	.2122	.1633
#1	.2525	40.11	1.984	2.021	2.016	40.11	2.034	2.019	1.996	2.029
#2	.2523	40.22	1.983	2.025	2.020	40.23	2.033	2.019	2.004	2.022
#3	.2525	40.15	1.989	2.026	2.018	40.18	2.035	2.019	2.000	2.026
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.42	41.22	40.18	2.074	2.033	40.58	2.010	2.007	1.993	1.988
Stddev	.13	.08	.18	.004	.004	.04	.001	.004	.003	.001
%RSD	.3230	.2020	.4429	.2093	.1822	.0939	.0419	.2174	.1624	.0621
#1	41.26	41.14	40.11	2.069	2.029	40.56	2.010	2.010	1.990	1.987
#2	41.51	41.30	40.38	2.078	2.034	40.63	2.009	2.002	1.994	1.989
#3	41.48	41.23	40.04	2.075	2.036	40.57	2.010	2.009	1.996	1.989
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.742	2.033	2.080	2.103	2.023	2.038	2.027
Stddev	.001	.003	.002	.004	.003	.003	.002
%RSD	.0449	.1219	.1016	.2072	.1479	.1377	.0952
#1	1.743	2.034	2.077	2.098	2.021	2.035	2.029
#2	1.743	2.030	2.081	2.106	2.021	2.040	2.025
#3	1.741	2.034	2.081	2.104	2.026	2.040	2.028
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/12/2016 17:43:41 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2566.5	6757.1	52584.	5423.7
Stddev	4.0	3.6	141.	17.5
%RSD	.15466	.05280	.26750	.32261
#1	2563.2	6757.3	52676.	5443.3
#2	2570.9	6753.4	52422.	5409.5
#3	2565.6	6760.5	52654.	5418.4

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/12/2016 17:47:38 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0097	.0009	.0004	.0003	.0232	.0002	.0001	.0001
Stddev	.0002	.0143	.0008	.0001	.0001	.0037	.0001	.0001	.0003
%RSD	319.0	147.1	95.44	42.47	41.79	15.96	31.14	61.83	597.0
#1	-.0001	.0021	.0008	.0002	.0003	.0269	.0002	.0002	.0000
#2	.0001	.0009	.0017	.0005	.0005	.0234	.0001	.0001	-.0002
#3	.0003	.0263	.0001	.0004	.0002	.0195	.0002	.0000	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0299	.0674	-.0049	.0003	F.0025	.0222	.0001	.0004
Stddev	.0002	.0048	.0333	.0105	.0001	.0005	.0049	.0001	.0003
%RSD	74.69	16.20	49.42	215.7	26.14	21.29	21.88	121.3	59.37
#1	-.0005	.0335	.1026	.0072	.0004	.0031	.0251	.0002	.0007
#2	-.0001	.0317	.0363	-.0120	.0003	.0024	.0166	.0002	.0002
#3	-.0002	.0244	.0633	-.0098	.0002	.0020	.0250	.0000	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0016	-.0002	.0010	.0004	.0005	.0015	.0006	.0002	.0001
Stddev	.0010	.0006	.0003	.0002	.0001	.0001	.0003	.0001	.0000
%RSD	61.98	353.6	26.57	48.93	11.14	8.779	45.26	46.47	33.30
#1	.0023	.0004	.0010	.0007	.0005	.0016	.0008	.0001	.0001
#2	.0005	-.0002	.0007	.0003	.0005	.0015	.0007	.0003	.0001
#3	.0021	-.0007	.0012	.0003	.0004	.0013	.0003	.0004	.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/12/2016 17:47:38 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3057.2	7173.7	56043.	5462.0
Stddev	10.1	12.7	164.	15.8
%RSD	.32872	.17751	.29330	.28975
#1	3062.5	7172.1	55926.	5471.8
#2	3063.4	7187.2	55972.	5443.7
#3	3045.6	7161.9	56231.	5470.3

SGS ACCUTEST FA33720

Zoom In Zoom Out

Sample Name: FA33697-1 Acquired: 5/12/2016 17:51:48 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	.0411	20.09	1.066	.5708	.0014	185.2	.3651	1.263
Stddev	.0017	.04	.020	.0021	.0017	.2	.0185	.002
%RSD	4.243	.1936	1.841	.3704	121.5	.1097	5.056	.1684
#1	.0391	20.12	1.048	.5702	.0032	185.2	.3775	1.261
#2	.0420	20.09	1.061	.5691	.0008	185.0	.3741	1.265
#3	.0421	20.04	1.087	.5732	.0000	185.4	.3439	1.263

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	10.54	12.08	F10020.	7.244	6.891	F75.58	2.388	5.180
Stddev	.02	.01	162.	.178	.097	.23	.005	.115
%RSD	.2336	.1212	1.622	2.460	1.410	.3053	.1989	2.224
#1	10.51	12.08	9888.	7.285	6.863	75.35	2.383	5.298
#2	10.54	12.07	9965.	7.398	6.999	75.81	2.391	5.067
#3	10.56	12.10	10200.	7.049	6.810	75.58	2.390	5.176

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	5.057	F194.7	.3395	F-.2934	2.782	1.094	1.110	1.691
Stddev	.009	.2	.0138	.0197	.005	.005	.004	.001
%RSD	.1706	.1119	4.067	6.714	.1872	.4590	.3452	.0497
#1	5.048	195.0	.3446	-.2952	2.784	1.100	1.105	1.691
#2	5.058	194.6	.3500	-.3122	2.787	1.091	1.112	1.692
#3	5.065	194.6	.3239	-.2729	2.777	1.092	1.112	1.691

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	.0474	.2780	39.22
Stddev	.0047	.0032	.01
%RSD	10.01	1.149	.0169
#1	.0421	.2783	39.23
#2	.0514	.2810	39.23
#3	.0488	.2746	39.22

Zoom In Zoom Out

Sample Name: FA33697-1 Acquired: 5/12/2016 17:51:48 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2989.2	6611.0	50959.	5403.9
Stddev	4.7	2.0	172.	48.9
%RSD	.15579	.02995	.33700	.90542
#1	2984.2	6608.9	51144.	5416.4
#2	2993.4	6612.9	50804.	5445.3
#3	2990.0	6611.2	50928.	5349.9

Zoom In Zoom Out

Sample Name: FA33697-1 Acquired: 5/12/2016 17:56:06 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 20.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	.0421	18.98	1.083	.5356	.0004	176.9	.2291	1.230
Stddev	.0081	.16	.017	.0010	.0007	.7	.0156	.003
%RSD	19.23	.8582	1.568	.1944	161.8	.4086	6.827	.2119
#1	.0513	19.04	1.103	.5345	.0005	176.9	.2112	1.227
#2	.0390	18.80	1.072	.5357	.0011	176.2	.2359	1.232
#3	.0361	19.11	1.074	.5366	-.0003	177.7	.2402	1.230

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	10.09	11.54	F10760.	7.072	6.188	74.48	2.288	4.616
Stddev	.02	.02	163.	.453	.220	.35	.005	.070
%RSD	.1695	.1819	1.519	6.401	3.557	.4706	.2283	1.525
#1	10.10	11.56	10950.	7.286	6.418	74.87	2.294	4.539
#2	10.07	11.52	10670.	7.377	5.979	74.20	2.286	4.678
#3	10.09	11.54	10660.	6.551	6.168	74.37	2.285	4.631

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	4.871	F198.0	.3211	F-.2740	2.665	1.063	1.046	1.616
Stddev	.019	.3	.0134	.0261	.007	.007	.004	.001
%RSD	.3928	.1536	4.182	9.531	.2800	.6925	.3870	.0501
#1	4.893	197.9	.3244	-.2769	2.669	1.058	1.043	1.615
#2	4.863	198.4	.3063	-.2985	2.669	1.061	1.046	1.616
#3	4.858	197.8	.3326	-.2466	2.656	1.072	1.051	1.616

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	.0646	.2556	38.28
Stddev	.0160	.0048	.02
%RSD	24.81	1.881	.0502
#1	.0566	.2557	38.29
#2	.0831	.2508	38.26
#3	.0542	.2604	38.29

Zoom In Zoom Out

Sample Name: FA33697-1 Acquired: 5/12/2016 17:56:06 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 20.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2996.9	6863.8	52578.	5391.3
Stddev	3.8	9.5	187.	47.2
%RSD	.12763	.13788	.35648	.87481
#1	2998.3	6859.4	52370.	5351.1
#2	2992.6	6874.7	52733.	5443.3
#3	2999.9	6857.4	52631.	5379.7

Zoom In Zoom Out

Sample Name: FA33720-1 Acquired: 5/12/2016 18:00:25 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	.0022	199.0	.1067	1.840	.0137	F1018.	.0053	.0643
Stddev	.0004	3.4	.0005	.007	.0002	7.	.0001	.0001
%RSD	16.57	1.718	.4605	.3911	1.166	.6816	1.092	.0816
#1	.0027	197.6	.1070	1.841	.0138	1010.	.0053	.0643
#2	.0019	202.9	.1061	1.833	.0135	1021.	.0054	.0643
#3	.0021	196.5	.1070	1.847	.0138	1023.	.0053	.0642

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	.1504	.3505	184.3	38.13	157.6	3.495	.0057	1.130
Stddev	.0003	.0006	.5	.13	.4	.014	.0000	.009
%RSD	.2286	.1760	.2959	.3314	.2655	.4019	.1675	.8265
#1	.1500	.3499	184.4	38.17	157.4	3.490	.0056	1.121
#2	.1507	.3507	183.8	37.99	157.3	3.485	.0057	1.129
#3	.1505	.3511	184.8	38.23	158.1	3.511	.0057	1.140

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.1497	1.265	.0041	-.0042	2.363	.0177	1.563	2.905
Stddev	.0002	.001	.0013	.0010	.004	.0002	.007	.012
%RSD	.1155	.0895	30.89	24.96	.1613	1.150	.4507	.4197
#1	.1495	1.266	.0056	-.0053	2.360	.0175	1.564	2.892
#2	.1498	1.265	.0035	-.0037	2.362	.0178	1.556	2.908
#3	.1496	1.264	.0033	-.0034	2.367	.0179	1.570	2.915

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	F-.0131	.2871	.6197
Stddev	.0011	.0007	.0009
%RSD	8.513	.2592	.1487
#1	-.0127	.2862	.6188
#2	-.0122	.2874	.6206
#3	-.0143	.2877	.6196

Zoom In Zoom Out

Sample Name: FA33720-1 Acquired: 5/12/2016 18:00:25 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2176.1	9759.3	71743.	8200.5
Stddev	3.4	5.5	119.	30.5
%RSD	.15541	.05640	.16614	.37239
#1	2173.0	9759.5	71796.	8211.4
#2	2175.6	9753.6	71828.	8165.9
#3	2179.7	9764.6	71607.	8224.0

Zoom In Zoom Out

Sample Name: FA33720-2 Acquired: 5/12/2016 18:04:58 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	.0018	73.14	.0653	.7704	.0137	206.4	.0033	.0554
Stddev	.0001	.14	.0002	.0006	.0001	2.9	.0001	.0000
%RSD	7.435	.1937	.3474	.0826	.5592	1.414	1.666	.0835
#1	.0017	73.28	.0651	.7710	.0137	205.9	.0033	.0554
#2	.0017	73.13	.0656	.7705	.0138	209.5	.0032	.0554
#3	.0019	73.00	.0653	.7697	.0137	203.7	.0033	.0553

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	.0871	.1227	196.4	24.74	92.46	3.464	.0077	1.066
Stddev	.0001	.0002	.6	.02	.18	.025	.0000	.006
%RSD	.1157	.1395	.3168	.0644	.1958	.7183	.2723	.5862
#1	.0871	.1225	197.1	24.76	92.63	3.471	.0077	1.067
#2	.0873	.1229	195.9	24.74	92.49	3.484	.0077	1.072
#3	.0871	.1227	196.2	24.73	92.27	3.436	.0077	1.059

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.1086	.3626	-.0013	-.0064	1.072	.0152	.2146	3.136
Stddev	.0001	.0005	.0001	.0006	.002	.0002	.0003	.007
%RSD	.1239	.1430	4.610	9.023	.1641	1.400	.1399	.2385
#1	.1087	.3620	-.0013	-.0060	1.072	.0152	.2150	3.127
#2	.1084	.3629	-.0013	-.0070	1.071	.0150	.2145	3.138
#3	.1085	.3628	-.0012	-.0061	1.074	.0155	.2144	3.141

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	F-.0158	.2684	.6224
Stddev	.0011	.0005	.0002
%RSD	7.276	.1918	.0301
#1	-.0156	.2689	.6222
#2	-.0171	.2679	.6224
#3	-.0148	.2683	.6226

Zoom In Zoom Out

Sample Name: FA33720-2 Acquired: 5/12/2016 18:04:58 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2500.4	13643.	104860.	11235.
Stddev	6.2	8.	224.	58.
%RSD	.24611	.05722	.21348	.52025
#1	2495.2	13635.	104850.	11175.
#2	2498.9	13644.	104640.	11239.
#3	2507.2	13651.	105090.	11292.

Zoom In Zoom Out

Sample Name: FA33764-1 Acquired: 5/12/2016 18:09:30 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0031	180.5	.2459	1.527	.0186	714.7	.0014	.1787	.2514	.5125
Stddev	.0012	.3	.0018	.000	.0007	3.6	.0002	.0012	.0025	.0009
%RSD	38.37	.1556	.7351	.0060	3.993	.4970	17.48	.6562	.9876	.1838
#1	.0043	180.4	.2471	1.527	.0181	710.9	.0011	.1774	.2521	.5133
#2	.0019	180.7	.2468	1.527	.0194	715.1	.0016	.1797	.2535	.5127
#3	.0032	180.2	.2438	1.527	.0182	718.0	.0014	.1789	.2487	.5115

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	404.1	25.87	71.83	10.28	.0110	1.626	.3523	.8011	.0061	.0055
Stddev	.3	.12	.35	.02	.0007	.036	.0017	.0016	.0023	.0014
%RSD	.0619	.4503	.4907	.1501	5.993	2.189	.4807	.1987	38.32	25.19
#1	404.4	25.96	72.12	10.29	.0116	1.607	.3504	.8006	.0069	.0043
#2	403.9	25.74	71.94	10.28	.0110	1.605	.3530	.7999	.0079	.0052
#3	404.0	25.92	71.44	10.26	.0103	1.668	.3535	.8029	.0034	.0070

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.155	.0617	1.926	1.086	.0129	.2891	1.779
Stddev	.003	.0008	.003	.001	.0002	.0013	.001
%RSD	.1371	1.295	.1683	.1330	1.276	.4594	.0373
#1	2.152	.0611	1.926	1.086	.0129	.2900	1.778
#2	2.156	.0626	1.930	1.085	.0130	.2898	1.778
#3	2.158	.0615	1.923	1.088	.0127	.2876	1.779

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2697.4	7867.9	59897.	6191.0
Stddev	2.2	11.3	103.	42.6
%RSD	.08074	.14408	.17123	.68841
#1	2699.7	7880.0	59821.	6205.1
#2	2697.1	7857.5	59856.	6143.2
#3	2695.3	7866.2	60013.	6224.8

Zoom In Zoom Out

Sample Name: FA33764-2 Acquired: 5/12/2016 18:13:43 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0058	272.9	.1086	1.969	.0175	297.3	.0017	.1923	.3236	.2759
Stddev	.0007	.6	.0029	.001	.0001	.7	.0002	.0003	.0035	.0020
%RSD	11.96	.2312	2.638	.0628	.3417	.2468	14.69	.1403	1.097	.7369
#1	.0066	272.2	.1053	1.968	.0175	296.5	.0016	.1923	.3215	.2763
#2	.0058	273.1	.1102	1.970	.0175	297.6	.0019	.1920	.3215	.2777
#3	.0052	273.4	.1104	1.970	.0174	297.9	.0015	.1925	.3277	.2737

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	499.9	31.69	77.88	11.45	.0118	.8829	.3487	.5053	-.0022	-.0054
Stddev	1.2	.14	.36	.01	.0002	.0418	.0011	.0024	.0013	.0061
%RSD	.2470	.4461	.4657	.0439	1.930	4.735	.3135	.4798	58.40	112.5
#1	498.5	31.61	77.49	11.45	.0117	.9280	.3486	.5034	-.0010	-.0081
#2	500.8	31.61	77.93	11.46	.0117	.8455	.3477	.5081	-.0036	-.0097
#3	500.5	31.85	78.21	11.45	.0121	.8751	.3499	.5045	-.0020	.0016

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.995	.0379	.8091	1.093	.0069	.4242	1.101
Stddev	.002	.0012	.0021	.002	.0028	.0017	.002
%RSD	.1099	3.220	.2640	.2188	40.39	.3996	.1805
#1	1.998	.0366	.8067	1.092	.0042	.4222	1.101
#2	1.993	.0391	.8105	1.096	.0067	.4251	1.098
#3	1.994	.0379	.8102	1.091	.0098	.4252	1.102

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2759.8	8405.7	64267.	6511.9
Stddev	6.0	9.0	410.	31.7
%RSD	.21618	.10696	.63860	.48743
#1	2762.0	8404.9	64552.	6521.3
#2	2764.4	8415.1	64453.	6537.9
#3	2753.1	8397.2	63797.	6476.5

Zoom In Zoom Out

Sample Name: FA33764-3 Acquired: 5/12/2016 18:17:53 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0041	319.0	.0507	2.189	.0179	129.8	-.0002	.1472	.3970	.1906
Stddev	.0009	.6	.0005	.001	.0004	.3	.0003	.0002	.0015	.0012
%RSD	22.47	.1971	.8988	.0321	2.503	.2056	133.2	.1277	.3764	.6209
#1	.0049	319.7	.0511	2.188	.0175	130.1	.0001	.1471	.3986	.1912
#2	.0043	318.6	.0509	2.190	.0184	129.8	-.0004	.1471	.3968	.1914
#3	.0031	318.7	.0502	2.190	.0177	129.6	-.0004	.1474	.3957	.1893

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	392.0	22.74	52.71	5.888	.0058	.9163	.2915	.3400	-.0050	-.0052
Stddev	1.1	.04	.05	.011	.0006	.0265	.0003	.0028	.0028	.0059
%RSD	.2815	.1580	.0887	.1830	10.36	2.893	.1099	.8341	56.84	114.3
#1	390.8	22.70	52.69	5.891	.0056	.9038	.2917	.3376	-.0032	.0016
#2	392.8	22.76	52.68	5.897	.0054	.8984	.2917	.3393	-.0035	-.0081
#3	392.5	22.75	52.77	5.876	.0065	.9468	.2912	.3431	-.0082	-.0090

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.124	.0239	.5396	.7760	.0022	.4201	.8340
Stddev	.001	.0005	.0004	.0009	.0016	.0007	.0005
%RSD	.0643	1.933	.0668	.1185	74.66	.1641	.0611
#1	2.124	.0234	.5399	.7757	.0025	.4205	.8344
#2	2.123	.0241	.5392	.7770	.0004	.4193	.8343
#3	2.125	.0243	.5398	.7753	.0035	.4204	.8335

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2803.3	8448.9	64043.	6415.9
Stddev	2.6	2.3	134.	46.3
%RSD	.09193	.02744	.20944	.72207
#1	2804.3	8450.6	63930.	6440.7
#2	2800.3	8449.9	64007.	6362.5
#3	2805.2	8446.3	64191.	6444.6

Zoom In Zoom Out

Sample Name: FA33764-4 Acquired: 5/12/2016 18:21:56 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0069	216.1	.1300	3.057	.0167	537.0	.0036	.1952	.2586
Stddev	.0008	.2	.0006	.002	.0005	.6	.0003	.0004	.0012
%RSD	11.48	.0721	.4873	.0609	2.830	.1047	7.279	.1806	.4795
#1	.0076	215.9	.1301	3.055	.0173	536.6	.0038	.1955	.2589
#2	.0072	216.2	.1305	3.058	.0165	537.7	.0033	.1948	.2597
#3	.0060	216.1	.1293	3.059	.0164	536.8	.0037	.1953	.2573

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	1.048	433.7	45.81	53.51	F21.64	.0128	1.419	.2934	1.030
Stddev	.003	1.3	.13	.19	.07	.0002	.021	.0005	.002
%RSD	.2615	.3028	.2775	.3470	.3445	1.859	1.509	.1762	.1708
#1	1.047	432.3	45.70	53.56	21.73	.0130	1.438	.2939	1.031
#2	1.051	434.9	45.78	53.67	21.61	.0129	1.396	.2929	1.032
#3	1.046	433.9	45.95	53.31	21.59	.0125	1.424	.2935	1.028

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0001	-.0028	2.114	.1599	1.481	1.544	.0143	.3737	1.775
Stddev	.0070	.0035	.005	.0016	.005	.003	.0003	.0007	.005
%RSD	10820.	126.0	.2447	.9720	.3713	.2033	2.279	.1943	.2857
#1	-.0074	-.0031	2.117	.1617	1.475	1.547	.0143	.3745	1.781
#2	.0065	-.0061	2.108	.1591	1.485	1.542	.0147	.3731	1.774
#3	.0011	.0009	2.116	.1588	1.482	1.542	.0140	.3734	1.771

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2722.1	7903.8	60029.	6090.7
Stddev	2.7	15.0	248.	54.7
%RSD	.09883	.19013	.41240	.89765
#1	2722.9	7887.9	59846.	6130.7
#2	2724.3	7905.8	60310.	6028.4
#3	2719.1	7917.7	59930.	6113.1

Zoom In Zoom Out

Sample Name: FA33764-5 Acquired: 5/12/2016 18:26:08 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0034	267.1	.0730	1.409	.0136	260.5	-.0005	.1960	.3365	.2319
Stddev	.0010	.9	.0019	.004	.0004	.9	.0002	.0007	.0006	.0019
%RSD	28.40	.3417	2.566	.3228	3.247	.3469	30.50	.3435	.1898	.7994
#1	.0043	266.1	.0714	1.406	.0141	259.5	-.0006	.1967	.3359	.2297
#2	.0024	267.3	.0726	1.408	.0133	260.8	-.0004	.1954	.3366	.2331
#3	.0034	267.9	.0751	1.414	.0135	261.3	-.0007	.1958	.3371	.2328

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	455.4	25.50	89.27	5.816	.0107	1.372	.3547	.3000	-.0048	-.0146
Stddev	1.3	.03	.20	.005	.0001	.070	.0008	.0020	.0022	.0067
%RSD	.2892	.1120	.2231	.0952	1.325	5.111	.2170	.6718	45.25	45.88
#1	454.0	25.54	89.16	5.822	.0108	1.308	.3543	.3020	-.0043	-.0217
#2	455.8	25.50	89.16	5.811	.0105	1.447	.3556	.3001	-.0029	-.0135
#3	456.5	25.48	89.50	5.816	.0107	1.359	.3542	.2980	-.0071	-.0085

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.096	.0245	.5737	1.026	.0040	.3818	.9756
Stddev	.001	.0007	.0015	.002	.0011	.0003	.0015
%RSD	.0568	2.854	.2549	.2117	27.14	.0827	.1553
#1	2.096	.0245	.5741	1.029	.0042	.3816	.9759
#2	2.096	.0251	.5721	1.025	.0049	.3821	.9739
#3	2.098	.0238	.5750	1.026	.0028	.3816	.9769

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2774.6	8107.1	61606.	6235.0
Stddev	3.5	3.3	203.	57.5
%RSD	.12507	.04060	.32889	.92208
#1	2778.6	8109.7	61565.	6269.5
#2	2773.0	8108.3	61428.	6168.6
#3	2772.2	8103.4	61827.	6266.9

Zoom In Zoom Out

Sample Name: FA33764-6 Acquired: 5/12/2016 18:30:12 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0028	342.0	.0487	1.831	.0191	130.8	-.0013	.1534	.3679	.1891
Stddev	.0009	.6	.0042	.001	.0003	.0	.0002	.0003	.0014	.0008
%RSD	30.61	.1699	8.705	.0541	1.513	.0169	17.40	.1700	.3859	.4349
#1	.0029	341.5	.0455	1.831	.0195	130.8	-.0014	.1535	.3693	.1887
#2	.0036	342.6	.0535	1.832	.0190	130.8	-.0010	.1536	.3679	.1886
#3	.0019	341.9	.0471	1.831	.0190	130.7	-.0015	.1531	.3664	.1900

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	377.6	20.88	52.11	4.069	.0035	1.104	.3035	.3647	-.0030	-.0088
Stddev	.6	.14	.25	.006	.0003	.038	.0007	.0017	.0055	.0051
%RSD	.1603	.6712	.4849	.1438	7.914	3.459	.2368	.4746	180.0	57.96
#1	377.7	21.00	52.28	4.073	.0036	1.077	.3030	.3627	-.0055	-.0097
#2	377.0	20.91	52.22	4.072	.0031	1.087	.3043	.3655	.0032	-.0033
#3	378.2	20.72	51.82	4.063	.0036	1.148	.3031	.3659	-.0068	-.0134

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.182	.0247	.5072	.7270	-.0008	.4542	.8492
Stddev	.002	.0012	.0004	.0026	.0028	.0003	.0013
%RSD	.0701	5.045	.0773	.3578	372.2	.0740	.1563
#1	2.184	.0261	.5071	.7254	-.0039	.4543	.8487
#2	2.182	.0237	.5077	.7300	.0016	.4544	.8482
#3	2.181	.0244	.5069	.7256	.0000	.4538	.8507

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2801.8	8618.8	64970.	6525.0
Stddev	3.2	8.3	328.	29.9
%RSD	.11422	.09681	.50477	.45757
#1	2801.1	8618.0	64632.	6491.8
#2	2805.3	8627.5	64992.	6549.8
#3	2799.1	8610.9	65287.	6533.3

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/12/2016 18:34:15 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2501	40.80	1.944	2.051	2.067	40.44	2.033	2.016	1.990	2.047
Stddev	.0012	.14	.006	.006	.006	.10	.004	.004	.004	.004
%RSD	.4885	.3377	.2920	.3181	.2739	.2423	.1870	.1818	.2114	.1942
#1	.2515	40.70	1.940	2.051	2.064	40.39	2.029	2.013	1.992	2.051
#2	.2497	40.74	1.941	2.044	2.064	40.39	2.032	2.016	1.985	2.046
#3	.2491	40.96	1.950	2.057	2.074	40.56	2.037	2.020	1.993	2.043
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.69	42.25	41.02	2.069	2.019	41.58	1.986	2.011	1.959	1.953
Stddev	.20	.12	.23	.004	.008	.08	.003	.004	.006	.005
%RSD	.4901	.2833	.5556	.1943	.3949	.2003	.1370	.1920	.3237	.2840
#1	41.50	42.27	40.80	2.071	2.011	41.56	1.984	2.013	1.954	1.947
#2	41.66	42.13	41.00	2.064	2.020	41.52	1.985	2.007	1.958	1.958
#3	41.90	42.36	41.25	2.072	2.027	41.68	1.989	2.014	1.966	1.955
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.717	1.992	2.159	2.106	2.023	2.043	2.027
Stddev	.004	.003	.007	.003	.004	.003	.002
%RSD	.2048	.1551	.3095	.1367	.2015	.1657	.1170
#1	1.714	1.989	2.159	2.108	2.021	2.045	2.025
#2	1.715	1.993	2.152	2.102	2.019	2.039	2.029
#3	1.721	1.996	2.166	2.107	2.027	2.044	2.029
Check ? Value Range	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/12/2016 18:34:15 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2566.7	6791.8	52104.	5229.6
Stddev	2.0	4.5	189.	30.2
%RSD	.07729	.06691	.36217	.57708
#1	2564.5	6795.5	52043.	5261.5
#2	2568.5	6793.1	52316.	5226.0
#3	2567.0	6786.7	51954.	5201.5

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/12/2016 18:38:12 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0030	.0009	.0002	.0001	.0073	.0001	.0001	.0001
Stddev	.0004	.0092	.0003	.0001	.0000	.0051	.0000	.0001	.0000
%RSD	719.9	309.1	34.53	64.66	22.49	70.24	38.63	67.93	43.56
#1	-.0003	-.0030	.0006	.0003	.0001	.0126	.0001	.0002	.0000
#2	.0005	.0136	.0013	.0003	.0001	.0069	.0001	.0000	.0001
#3	-.0001	-.0017	.0010	.0001	.0001	.0024	.0001	.0002	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0318	.0345	.0121	.0002	F.0024	-.0094	-.0001	-.0006
Stddev	.0001	.0057	.0287	.0131	.0000	.0006	.0035	.0000	.0007
%RSD	84.69	17.92	83.11	107.9	16.85	25.37	37.55	77.64	109.8
#1	-.0002	.0315	.0020	.0271	.0002	.0030	-.0056	.0000	.0000
#2	-.0002	.0377	.0564	.0033	.0003	.0021	-.0125	-.0001	-.0006
#3	.0000	.0263	.0451	.0059	.0002	.0019	-.0101	.0000	-.0013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F.0021	.0005	.0010	.0003	.0003	.0011	.0002	.0002	.0001
Stddev	.0003	.0013	.0001	.0000	.0001	.0001	.0005	.0001	.0000
%RSD	15.51	256.4	7.355	15.71	17.30	11.76	238.3	59.88	22.57
#1	.0024	.0018	.0009	.0002	.0003	.0012	-.0003	.0002	.0001
#2	.0021	-.0009	.0009	.0003	.0003	.0012	.0007	.0001	.0001
#3	.0017	.0007	.0011	.0003	.0002	.0010	.0002	.0003	.0000
Check ?	Chk Fail	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.0020								
Low Limit	-.0020								

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/12/2016 18:38:12 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3037.8	7135.0	55750.	5345.4
Stddev	4.9	3.9	271.	32.4
%RSD	.15981	.05422	.48574	.60591
#1	3041.6	7130.6	55471.	5308.9
#2	3032.3	7136.7	56012.	5370.7
#3	3039.4	7137.8	55768.	5356.6

Zoom In Zoom Out

Sample Name: FA33857-1 Acquired: 5/12/2016 18:42:23 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	.0044	7.946	.0135	*****	-.0014	F1021.	.0156	.0234
Stddev	.0003	.023	.0009	-----	.0001	18.	.0000	.0003
%RSD	6.635	.2903	7.014	-----	8.552	1.799	.2998	1.183
#1	.0044	7.964	.0135	-----	-.0015	1039.	.0156	.0233
#2	.0047	7.920	.0145	-----	-.0015	1002.	.0156	.0232
#3	.0041	7.954	.0126	-----	-.0013	1022.	.0157	.0237

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	.6897	.1023	33.75	.6634	10.14	.4295	.0047	5.884
Stddev	.0009	.0008	.09	.0171	.05	.0008	.0001	.014
%RSD	.1306	.7676	.2689	2.570	.4586	.1862	2.539	.2306
#1	.6897	.1022	33.79	.6581	10.19	.4290	.0048	5.898
#2	.6906	.1015	33.65	.6825	10.13	.4304	.0046	5.881
#3	.6888	.1031	33.82	.6497	10.10	.4290	.0046	5.871

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.0247	3.477	.0062	-.0024	1.193	.0106	F4.249	F38.85
Stddev	.0001	.005	.0007	.0019	.001	.0001	.049	.07
%RSD	.5802	.1586	11.14	78.23	.0945	.5010	1.150	.1890
#1	.0246	3.483	.0056	-.0035	1.194	.0106	4.282	38.92
#2	.0246	3.472	.0070	-.0002	1.192	.0106	4.193	38.85
#3	.0249	3.476	.0061	-.0034	1.192	.0105	4.273	38.77

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	F-.0879	.0720	.5137
Stddev	.0013	.0003	.0005
%RSD	1.533	.3682	.1027
#1	-.0867	.0717	.5143
#2	-.0894	.0722	.5133
#3	-.0875	.0721	.5136

Zoom In Zoom Out

Sample Name: FA33857-1 Acquired: 5/12/2016 18:42:23 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2149.0	6886.1	52485.	5670.3
Stddev	1.1	1.1	219.	36.0
%RSD	.05300	.01631	.41690	.63549
#1	2148.1	6885.7	52597.	5665.2
#2	2150.3	6885.3	52233.	5708.6
#3	2148.6	6887.4	52625.	5637.0

Zoom In Zoom Out

Sample Name: FA33756-2 Acquired: 5/12/2016 18:46:56 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0079	12.04	.0031	.2236	.0003	30.84	.0001	.0158	.6469	.1945
Stddev	.0001	.04	.0004	.0013	.0000	.09	.0000	.0001	.0031	.0009
%RSD	1.331	.3702	14.42	.5820	9.505	.2918	32.19	.5130	.4722	.4591
#1	.0077	11.99	.0035	.2221	.0002	30.74	.0001	.0158	.6437	.1949
#2	.0079	12.07	.0031	.2243	.0003	30.89	.0001	.0157	.6471	.1935
#3	.0079	12.06	.0026	.2244	.0003	30.90	.0001	.0158	.6498	.1952

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	38.58	3.574	3.412	1.526	1.110	26.80	.4550	.0297	.0114	-.0014
Stddev	.10	.010	.043	.003	.001	.10	.0002	.0009	.0002	.0003
%RSD	.2695	.2886	1.260	.2027	.1160	.3650	.0419	3.094	2.002	18.97
#1	38.52	3.582	3.373	1.523	1.109	26.69	.4551	.0297	.0115	-.0014
#2	38.70	3.578	3.458	1.526	1.111	26.86	.4551	.0307	.0112	-.0012
#3	38.51	3.562	3.405	1.529	1.112	26.85	.4548	.0288	.0117	-.0017

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.7786	.0203	.4828	.0872	-.0002	.0400	.5761
Stddev	.0017	.0002	.0015	.0007	.0006	.0003	.0007
%RSD	.2156	1.034	.3184	.8173	302.6	.6320	.1262
#1	.7805	.0203	.4825	.0878	.0004	.0399	.5753
#2	.7772	.0201	.4844	.0875	-.0001	.0403	.5766
#3	.7782	.0206	.4814	.0864	-.0008	.0398	.5765

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2767.8	7655.4	58427.	5703.2
Stddev	4.5	4.8	105.	19.7
%RSD	.16142	.06296	.18026	.34500
#1	2772.9	7660.4	58510.	5724.9
#2	2764.5	7650.7	58464.	5698.5
#3	2765.9	7655.0	58309.	5686.4

Zoom In Zoom Out

Sample Name: FA33756-3 Acquired: 5/12/2016 18:50:59 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0004	5.944	.0013	.1114	.0001	12.60	-.0001	.0047	.3054	.1281
Stddev	.0000	.030	.0001	.0004	.0000	.09	.0000	.0001	.0003	.0006
%RSD	8.878	.5027	6.619	.3527	48.06	.7368	10.95	1.567	.0839	.4904
#1	.0005	5.976	.0013	.1117	.0001	12.71	-.0001	.0048	.3054	.1283
#2	.0004	5.917	.0012	.1109	.0000	12.54	-.0001	.0046	.3057	.1274
#3	.0004	5.939	.0013	.1115	.0001	12.56	-.0001	.0047	.3052	.1285

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	15.38	1.822	.7998	.6823	.0104	.6460	.1312	.0112	.0031	-.0008
Stddev	.02	.021	.0239	.0014	.0002	.0110	.0002	.0004	.0009	.0014
%RSD	.1609	1.124	2.987	.2124	1.566	1.708	.1308	3.307	29.24	174.8
#1	15.36	1.800	.8024	.6840	.0105	.6395	.1311	.0114	.0036	.0007
#2	15.38	1.841	.7747	.6814	.0105	.6587	.1312	.0107	.0036	-.0012
#3	15.41	1.826	.8222	.6814	.0102	.6397	.1314	.0114	.0020	-.0019

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.052	.0239	.1420	.0503	-.0006	.0231	.3509
Stddev	.001	.0000	.0006	.0001	.0008	.0004	.0002
%RSD	.1368	.0373	.4317	.2458	138.0	1.610	.0679
#1	1.053	.0239	.1427	.0504	-.0003	.0236	.3512
#2	1.053	.0239	.1415	.0503	.0001	.0230	.3509
#3	1.051	.0239	.1420	.0502	-.0015	.0228	.3507

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2949.3	7450.3	56855.	5484.7
Stddev	1.8	8.3	365.	5.5
%RSD	.06012	.11181	.64266	.10072
#1	2951.2	7440.7	56520.	5478.9
#2	2949.2	7454.7	56801.	5485.2
#3	2947.7	7455.5	57244.	5489.9

Zoom In Zoom Out

Sample Name: FA33756-4 Acquired: 5/12/2016 18:55:03 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0307	4.823	.0046	.1206	.0001	3.357	-.0003	.0152	F6.069
Stddev	.0002	.013	.0012	.0002	.0000	.007	.0000	.0001	.008
%RSD	.6244	.2768	25.72	.1541	29.42	.2199	1.579	.6108	.1335
#1	.0305	4.824	.0050	.1207	.0001	3.366	-.0003	.0151	6.079
#2	.0307	4.836	.0055	.1208	.0001	3.353	-.0003	.0153	6.064
#3	.0309	4.810	.0033	.1204	.0000	3.354	-.0003	.0153	6.066

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.1314	13.87	.0900	.0977	.1562	.0180	.1882	F30.02	.0138
Stddev	.0005	.04	.0248	.0041	.0004	.0000	.0074	.12	.0007
%RSD	.3965	.2762	27.52	4.149	.2631	.1523	3.924	.4099	4.781
#1	.1312	13.88	.1032	.0963	.1562	.0179	.1966	29.96	.0145
#2	.1320	13.83	.1053	.0945	.1557	.0179	.1825	29.95	.0136
#3	.1311	13.91	.0614	.1022	.1565	.0180	.1857	30.17	.0133

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0096	-.0005	.4557	.0164	.0513	.4281	-.0029	.0558	.0928
Stddev	.0012	.0008	.0014	.0001	.0003	.0003	.0001	.0001	.0001
%RSD	12.40	168.3	.2993	.4892	.5809	.0661	2.346	.2126	.1321
#1	.0090	-.0003	.4541	.0164	.0515	.4284	-.0029	.0557	.0926
#2	.0089	.0002	.4562	.0165	.0514	.4281	-.0030	.0560	.0929
#3	.0110	-.0014	.4567	.0163	.0510	.4278	-.0029	.0558	.0927

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3002.4	7181.9	57726.	5665.4
Stddev	4.0	14.5	328.	35.2
%RSD	.13293	.20252	.56850	.62092
#1	2999.1	7196.4	57504.	5661.0
#2	3001.3	7167.3	58103.	5702.6
#3	3006.9	7182.0	57570.	5632.7

Zoom In Zoom Out

Sample Name: FA33756-5 Acquired: 5/12/2016 18:59:14 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	.0230	21.78	.0340	1.035	.0281	11.07	.0072	.0311
Stddev	.0001	.05	.0003	.001	.0001	.02	.0000	.0003
%RSD	.3172	.2337	.7975	.0806	.1902	.1908	.3269	.9277
#1	.0230	21.77	.0342	1.035	.0281	11.07	.0072	.0308
#2	.0229	21.83	.0337	1.035	.0281	11.10	.0072	.0311
#3	.0231	21.73	.0342	1.034	.0281	11.06	.0072	.0314

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	.3472	.9360	32.86	5.914	2.853	.7729	.0256	.8158
Stddev	.0008	.0016	.01	.012	.012	.0008	.0000	.0065
%RSD	.2372	.1706	.0407	.1967	.4125	.1094	.1855	.7909
#1	.3478	.9369	32.87	5.903	2.841	.7728	.0256	.8099
#2	.3475	.9342	32.85	5.926	2.865	.7737	.0256	.8227
#3	.3462	.9370	32.87	5.913	2.853	.7721	.0255	.8147

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.2844	.2520	.0114	-.0034	.2027	.1011	2.803	F16.11
Stddev	.0002	.0009	.0002	.0003	.0002	.0001	.031	.13
%RSD	.0565	.3694	1.921	9.096	.1229	.0789	1.114	.7963
#1	.2846	.2514	.0115	-.0033	.2029	.1010	2.834	16.21
#2	.2843	.2531	.0116	-.0037	.2024	.1012	2.803	16.14
#3	.2843	.2516	.0112	-.0031	.2026	.1011	2.772	15.96

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	F-.1677	.0882	1.692
Stddev	.0018	.0001	.002
%RSD	1.083	.0667	.1240
#1	-.1658	.0883	1.690
#2	-.1694	.0882	1.694
#3	-.1680	.0882	1.694

Zoom In Zoom Out

Sample Name: FA33756-5 Acquired: 5/12/2016 18:59:14 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2736.8	20236.	154520.	15526.
Stddev	4.9	15.	612.	49.
%RSD	.17852	.07399	.39627	.31500
#1	2742.4	20252.	154280.	15574.
#2	2734.6	20222.	154060.	15477.
#3	2733.4	20234.	155210.	15527.

Zoom In Zoom Out

Sample Name: FA33756-6 Acquired: 5/12/2016 19:03:31 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	F.9564	3.445	.0041	.1030	.0000	3.642	-.0045	.0281	F17.07
Stddev	.0021	.039	.0006	.0008	.000	.016	.0001	.0002	.10
%RSD	.2159	1.140	14.97	.7432	259.4	.4310	2.273	.6281	.5929
#1	.9579	3.413	.0036	.1026	.0001	3.638	-.0044	.0283	16.98
#2	.9572	3.433	.0048	.1026	-.0001	3.629	-.0045	.0280	17.18
#3	.9540	3.489	.0038	.1039	.0000	3.660	-.0046	.0280	17.04

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0195	6.028	.1083	.2875	.1067	.0091	.1285	F90.96	.0058
Stddev	.0001	.023	.0048	.0272	.0001	.0001	.0036	.18	.0010
%RSD	.6228	.3879	4.450	9.446	.1123	1.431	2.811	.1957	17.33
#1	.0194	6.020	.1040	.3189	.1066	.0091	.1309	91.10	.0069
#2	.0197	6.010	.1075	.2712	.1066	.0090	.1302	91.03	.0054
#3	.0195	6.055	.1135	.2725	.1068	.0092	.1244	90.76	.0050

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0511	-.0043	.5872	.0134	.0454	1.167	-.0038	.0513	.0195
Stddev	.0022	.0019	.0017	.0000	.0003	.001	.0003	.0004	.0002
%RSD	4.231	42.88	.2876	.2104	.5799	.0897	6.828	.8562	1.066
#1	.0531	-.0039	.5890	.0134	.0453	1.168	-.0039	.0514	.0193
#2	.0488	-.0064	.5870	.0134	.0452	1.167	-.0036	.0517	.0197
#3	.0514	-.0027	.5856	.0134	.0457	1.166	-.0041	.0508	.0196

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2998.1	6422.3	57125.	5562.0
Stddev	1.9	5.0	287.	7.5
%RSD	.06484	.07774	.50225	.13485
#1	2999.9	6423.4	57434.	5554.2
#2	2998.4	6416.8	57074.	5562.6
#3	2996.0	6426.6	56867.	5569.2

Zoom In Zoom Out

Sample Name: FA33652-1R Acquired: 5/12/2016 19:07:53 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 20.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0003	24.17	.0310	.0417	-.0017	2.355	-.0002	-.0020	.0918
Stddev	.0030	.21	.0039	.0014	.0006	.058	.0001	.0005	.0093
%RSD	900.8	.8519	12.66	3.405	35.29	2.449	46.25	23.42	10.17
#1	-.0013	24.19	.0285	.0432	-.0015	2.408	-.0004	-.0015	.1018
#2	-.0027	23.96	.0355	.0415	-.0012	2.364	-.0002	-.0024	.0903
#3	.0030	24.37	.0291	.0404	-.0023	2.294	-.0002	-.0021	.0833

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.6441	18.86	.4189	.5956	.0520	.0005	-.0877	.1538	.0155
Stddev	.0020	.19	.1656	.1971	.0005	.0008	.1266	.0380	.0026
%RSD	.3180	.9923	39.53	33.08	.8941	185.5	144.3	24.67	16.49
#1	.6446	18.93	.2299	.6338	.0521	-.0003	.0539	.1941	.0170
#2	.6459	19.01	.4884	.7708	.0515	.0003	-.1900	.1486	.0170
#3	.6419	18.65	.5384	.3823	.0524	.0014	-.1270	.1187	.0126

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0037	-.0184	2.553	.0206	.0384	.6963	-.0006	.0274	F90.67
Stddev	.0106	.0186	.062	.0033	.0002	.0173	.0088	.0048	.12
%RSD	284.2	101.3	2.421	16.01	.4679	2.483	1396.	17.67	.1331
#1	-.0014	-.0029	2.607	.0243	.0383	.6992	.0056	.0315	90.54
#2	-.0153	-.0132	2.567	.0191	.0386	.6777	-.0107	.0220	90.74
#3	.0055	-.0390	2.485	.0183	.0383	.7119	.0033	.0286	90.75

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3054.5	7301.3	56000.	5389.1
Stddev	4.7	17.6	321.	37.1
%RSD	.15325	.24045	.57268	.68903
#1	3059.7	7321.5	56310.	5347.3
#2	3053.5	7293.2	56019.	5418.1
#3	3050.5	7289.3	55669.	5402.0

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/12/2016 19:12:01 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0091	.2131	.0103	.2158	.0052	1.063	.0054	.0546	.0108	.0271
Stddev	.0001	.0081	.0002	.0002	.0001	.005	.0000	.0001	.0001	.0002
%RSD	1.204	3.797	2.212	.0723	2.508	.4810	.6443	.2705	.7378	.7493
#1	.0092	.2060	.0103	.2156	.0053	1.068	.0054	.0547	.0109	.0271
#2	.0090	.2115	.0105	.2157	.0050	1.058	.0054	.0545	.0108	.0273
#3	.0090	.2219	.0101	.2159	.0053	1.063	.0055	.0547	.0107	.0269

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.3272	10.98	5.376	.0169	.0498	10.71	.0442	.0045	.0043	.0102
Stddev	.0039	.04	.030	.0000	.0000	.03	.0004	.0003	.0007	.0010
%RSD	1.184	.3277	.5530	.1276	.0956	.2986	.7991	5.663	15.84	9.677
#1	.3256	10.94	5.346	.0169	.0497	10.68	.0446	.0043	.0041	.0108
#2	.3316	11.00	5.377	.0170	.0498	10.70	.0442	.0048	.0051	.0091
#3	.3243	11.01	5.406	.0170	.0498	10.75	.0439	.0045	.0038	.0108

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0437	.0522	.0108	.0127	.0099	.0498	.0228
Stddev	.0004	.0003	.0000	.0001	.0003	.0001	.0001
%RSD	.8812	.6553	.3426	.8591	3.191	.2678	.6555
#1	.0441	.0518	.0108	.0126	.0103	.0498	.0229
#2	.0435	.0521	.0107	.0128	.0099	.0499	.0227
#3	.0434	.0525	.0108	.0126	.0096	.0497	.0230

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2878.7	7075.3	53879.	5281.5
Stddev	7.6	22.0	66.	35.8
%RSD	.26232	.31029	.12173	.67863
#1	2883.1	7084.4	53924.	5276.0
#2	2882.9	7091.4	53804.	5248.8
#3	2869.9	7050.3	53910.	5319.8

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/12/2016 19:16:06 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	.0000	F511.9	-.0008	.0005	-.0001	470.4	-.0011	-.0004
Stddev	.000	4.3	.0008	.0001	.0000	7.7	.0001	.0002
%RSD	383.4	.8303	97.40	30.02	27.77	1.633	7.577	51.41
#1	-.0001	507.0	-.0004	.0003	-.0001	476.0	-.0011	-.0001
#2	.0000	514.3	-.0017	.0006	-.0001	461.6	-.0010	-.0004
#3	.0001	514.4	-.0003	.0005	-.0001	473.4	-.0012	-.0005

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	.0004	-.0005	179.8	.1463	F504.4	-.0011	.0003	.1298
Stddev	.0004	.0001	.4	.0234	1.3	.0000	.0002	.0055
%RSD	90.19	13.45	.2111	16.00	.2493	3.247	64.09	4.228
#1	.0000	-.0005	179.5	.1638	504.8	-.0011	.0002	.1361
#2	.0007	-.0004	179.7	.1553	503.0	-.0011	.0002	.1274
#3	.0004	-.0006	180.2	.1197	505.4	-.0011	.0006	.1260

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.0009	F-.0064	-.0001	-.0020	.0130	.0003	.0005	.0008
Stddev	.0002	.0021	.0003	.0002	.0001	.0004	.0001	.0002
%RSD	27.99	33.39	181.3	9.292	.6617	158.1	28.28	20.36
#1	.0011	-.0040	.0001	-.0018	.0130	.0001	.0003	.0009
#2	.0006	-.0078	-.0002	-.0022	.0131	.0008	.0006	.0008
#3	.0008	-.0075	-.0004	-.0020	.0129	.0000	.0005	.0006

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	.0015	.0002	-.0017
Stddev	.0017	.0001	.0001
%RSD	114.7	32.14	4.778
#1	.0007	.0001	-.0017
#2	.0035	.0002	-.0018
#3	.0004	.0003	-.0017

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/12/2016 19:16:06 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2315.3	6340.0	46766.	5120.2
Stddev	2.3	10.3	201.	21.6
%RSD	.10015	.16319	.42911	.42264
#1	2315.9	6350.9	46680.	5120.8
#2	2317.3	6330.4	46995.	5098.3
#3	2312.7	6338.8	46623.	5141.6

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 5/12/2016 19:20:24 Type: Unk
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	F.9965	F506.6	1.065	.5362	.5110	475.1	.9765	.4835	.5186
Stddev	.0013	10.0	.003	.0024	.0023	5.8	.0009	.0003	.0011
%RSD	.1312	1.980	.2709	.4388	.4454	1.226	.0951	.0662	.2161
#1	.9951	516.8	1.066	.5389	.5135	479.8	.9756	.4835	.5199
#2	.9977	496.8	1.062	.5347	.5102	468.6	.9765	.4832	.5178
#3	.9968	506.3	1.068	.5350	.5092	477.0	.9774	.4838	.5181

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.5474	181.1	.1047	F505.5	.5260	.9462	.1464	.9622	.9740
Stddev	.0005	.6	.0164	3.7	.0012	.0015	.0092	.0014	.0035
%RSD	.0973	.3539	15.70	.7346	.2284	.1541	6.260	.1411	.3553
#1	.5479	181.8	.0892	509.7	.5247	.9452	.1389	.9609	.9702
#2	.5473	180.5	.1219	502.6	.5270	.9455	.1566	.9622	.9770
#3	.5469	181.0	.1030	504.3	.5262	.9479	.1436	.9636	.9748

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.9957	.9987	.1045	.9146	1.067	1.041	.9682	.4805	.9777
Stddev	.0027	.0022	.0007	.0010	.006	.003	.0013	.0012	.0011
%RSD	.2760	.2197	.6677	.1136	.5429	.2427	.1313	.2511	.1093
#1	.9959	.9966	.1037	.9145	1.073	1.038	.9689	.4818	.9766
#2	.9929	1.001	.1051	.9136	1.066	1.043	.9667	.4794	.9780
#3	.9984	.9985	.1046	.9157	1.062	1.042	.9689	.4803	.9787

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2285.8	6305.6	46697.	5134.7
Stddev	2.2	8.9	249.	69.4
%RSD	.09805	.14090	.53368	1.3519
#1	2288.2	6315.2	46841.	5096.0
#2	2283.7	6304.1	46409.	5214.9
#3	2285.5	6297.6	46840.	5093.3

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/12/2016 19:24:40 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2497	40.04	1.916	2.026	2.014	39.71	1.999	1.981	1.965	2.013
Stddev	.0009	.30	.004	.013	.014	.31	.002	.002	.002	.004
%RSD	.3582	.7394	.1812	.6593	.7034	.7739	.1194	.0818	.0940	.2064
#1	.2488	40.38	1.920	2.041	2.030	40.06	2.002	1.982	1.964	2.008
#2	.2506	39.89	1.914	2.020	2.010	39.54	1.998	1.981	1.964	2.016
#3	.2496	39.85	1.913	2.016	2.003	39.52	1.997	1.979	1.967	2.014
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.07	41.68	40.06	2.045	1.988	40.87	1.954	1.981	1.936	1.928
Stddev	.10	.29	.26	.006	.002	.37	.002	.003	.003	.004
%RSD	.2496	.6990	.6611	.3163	.0741	.8979	.1131	.1247	.1650	.2345
#1	41.17	42.02	40.36	2.039	1.986	41.28	1.955	1.981	1.938	1.931
#2	40.97	41.53	39.91	2.044	1.988	40.73	1.955	1.979	1.932	1.929
#3	41.07	41.50	39.90	2.052	1.989	40.59	1.951	1.984	1.936	1.923
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.690	1.964	2.109	2.084	1.997	2.015	1.994
Stddev	.002	.004	.016	.007	.004	.005	.003
%RSD	.1427	.2130	.7578	.3413	.2047	.2302	.1406
#1	1.692	1.969	2.127	2.076	1.994	2.011	1.997
#2	1.691	1.961	2.104	2.085	1.995	2.014	1.993
#3	1.687	1.961	2.096	2.091	2.001	2.020	1.992
Check ? Value Range	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/12/2016 19:24:40 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2598.2	6883.5	52812.	5228.9
Stddev	4.2	10.9	353.	62.5
%RSD	.16036	.15812	.66848	1.1962
#1	2596.3	6870.9	53077.	5217.1
#2	2603.0	6889.7	52948.	5296.5
#3	2595.3	6889.8	52411.	5173.1

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/12/2016 19:28:37 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0085	.0006	.0001	.0001	.0084	.0001	.0001	-.0001
Stddev	.0003	.0064	.0006	.0001	.0001	.0011	.0001	.0001	.0001
%RSD	235.4	74.79	93.36	82.52	164.9	13.35	69.20	98.82	68.38
#1	-.0004	.0012	.0013	.0000	.0000	.0087	.0001	.0002	.0000
#2	-.0001	.0117	.0003	.0002	.0000	.0094	.0001	.0002	-.0002
#3	.0002	.0126	.0003	.0002	.0002	.0072	.0000	.0000	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0005	.0229	.0405	-.0188	.0002	F.0029	-.0127	.0001	.0000
Stddev	.0001	.0043	.0099	.0188	.0000	.0006	.0054	.0002	.0007
%RSD	25.80	18.94	24.47	100.1	5.786	20.84	42.80	222.2	2055.
#1	-.0003	.0262	.0508	-.0164	.0002	.0035	-.0132	.0002	-.0007
#2	-.0005	.0244	.0394	-.0388	.0002	.0027	-.0070	-.0001	.0007
#3	-.0006	.0180	.0311	-.0013	.0002	.0024	-.0178	.0000	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F.0024	.0009	.0010	.0002	.0001	.0012	.0003	.0001	.0000
Stddev	.0007	.0003	.0001	.0003	.0002	.0001	.0006	.0003	.0000
%RSD	27.55	35.21	8.304	123.5	111.6	11.52	233.6	218.8	88.10
#1	.0029	.0012	.0009	.0005	.0000	.0012	.0007	.0005	.0001
#2	.0025	.0005	.0011	.0003	.0001	.0011	-.0004	-.0001	.0000
#3	.0016	.0010	.0010	-.0001	.0003	.0014	.0005	.0001	.0000
Check ?	Chk Fail	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.0020								
Low Limit	-.0020								

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/12/2016 19:28:37 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3033.2	7183.1	55187.	5251.2
Stddev	8.1	13.8	384.	80.7
%RSD	.26568	.19231	.69658	1.5360
#1	3040.0	7194.9	55522.	5296.4
#2	3024.3	7167.9	55272.	5158.1
#3	3035.2	7186.4	54768.	5299.1

NOTE: The remaining raw data for this batch is not relevant to this job. As such it has been omitted.

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Ag 328.068 {103}	X	3	V	-0.009834	0.000000	No
			Fe	-0.000001	0.000000	No
			Mg	0.000002	0.000000	No
Al 396.152 { 85}	X	1	Mo	0.035224	0.000000	No
As 189.042 {478}	X	5	Fe	-0.000086	0.000000	No
			Cr	-0.000226	0.000000	No
			Mo	-0.000017	0.000000	No
			Al	0.000004	0.000000	No
			Ca	0.000002	0.000000	No
Ba 455.403 { 74}	X	1	Fe	0.000004	0.000000	No
Be 313.042 {108}	X	2	V	0.000115	0.000000	No
			Ti	-0.000059	0.000000	No
Ca 317.933 {106}	X	None				
Cd 226.502 {449}	X	4	Fe	0.000101	0.000000	No
			Ca	0.000001	0.000000	No
			Al	-0.000001	0.000000	No
			Ti	0.000151	0.000000	No
Co 228.616 {447}	X	3	Mo	-0.001220	0.000000	No
			Ti	0.003012	0.000000	No
			Fe	-0.000001	0.000000	No
Cr 267.716 {126}	X	3	Al	0.000005	0.000000	No
			Fe	-0.000018	0.000000	No
			Ca	0.000002	0.000000	No
Cu 324.754 {104}	X	10	Fe	-0.000145	0.000000	No
			Ca	0.000002	0.000000	No
			Mo	0.000528	0.000000	No
			Sn	-0.000012	0.000000	No
			V	-0.000158	0.000000	No
			Ti	-0.000251	0.000000	No
			Al	0.000004	0.000000	No
			Mg	0.000002	0.000000	No
			Co	-0.000787	0.000000	No
			Cd	0.000240	0.000000	No
Fe 259.940 {130}	X	None				
In 230.606 {446}*	X	None				
K 766.490 { 44}	X	None				
Mg 279.079 {121}	X	None				
Mn 257.610 {131}	X	2	Fe	-0.000002	0.000000	No
			Mg	0.000001	0.000000	No
Mo 202.030 {467}	X	1	Fe	-0.000017	0.000000	No
Na 589.592 { 57}	X	None				
Ni 231.604 {445}	X	7	Fe	-0.000044	0.000000	No
			Co	-0.000054	0.000000	No
			Mo	0.000005	0.000000	No
			Sb	-0.000120	0.000000	No
			Al	0.000003	0.000000	No
			Be	-0.000269	0.000000	No
			Tl	0.000440	0.000000	No
Pb 220.353 {453}	X	9	Al	0.000294	0.000000	No
			Fe	-0.000006	0.000000	No
			Mo	-0.001012	0.000000	No
			Cu	0.001070	0.000000	No
			Ti	0.000036	0.000000	No
			Si	0.000071	0.000000	No
			Ca	-0.000001	0.000000	No
			Cr	0.000050	0.000000	No
			Mg	0.000004	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Sb 206.833 {463}	☒	10	Fe	0.000012	0.000000	No
			Cr	0.012140	0.000000	No
			Mo	-0.004076	0.000000	No
			V	-0.000611	0.000000	No
			Sn	-0.010736	0.000000	No
			Ti	0.000040	0.000000	No
			Ca	-0.000001	0.000000	No
			Ni	-0.000438	0.000000	No
			Mg	-0.000002	0.000000	No
			Al	0.000003	0.000000	No
Se 196.090 {472}	☒	10	Fe	-0.000007	0.000000	No
			Ca	-0.000001	0.000000	No
			Mn	0.000574	0.000000	No
			Mo	0.000111	0.000000	No
			Al	-0.000015	0.000000	No
			V	0.000000	0.000000	No
			Zn	0.000000	0.000000	No
			Sr	0.000137	0.000000	No
			As	-0.000032	0.000000	No
			Be	0.000212	0.000000	No
Si 212.412 {459}	☒	1	Mo	0.019120	0.000000	No
Sn 189.989 {477}	☒	None				
Sr 407.771 { 83}	☒	1	Ca	0.000017	0.000000	No
Ti 334.941 {101}	☒	1	Ca	-0.000007	0.000000	No
Tl 190.856 {477}	☒	11	Co	0.001145	0.000000	No
			Fe	0.000004	0.000000	No
			Al	-0.000011	0.000000	No
			Ba	-0.000051	0.000000	No
			Ti	-0.002651	0.000000	No
			Sb	0.000012	0.000000	No
			Ca	0.000003	0.000000	No
			Cr	0.000230	0.000000	No
			Mg	-0.000003	0.000000	No
			Mn	0.000818	0.000000	No
			V	-0.038621	0.000000	No
V 292.402 {115}	☒	5	Fe	0.000008	0.000000	No
			Cr	-0.002590	0.000000	No
			Mo	-0.005797	0.000000	No
			Ti	0.000364	0.000000	No
			Mn	-0.000693	0.000000	No
Y 224.306 {450}*	☒	None				
Y 360.073 { 94}*	☒	None				
Y 371.030 { 91}*	☒	None				
Zn 206.200 {463}	☒	5	Cr	-0.000965	0.000000	No
			Al	0.000005	0.000000	No
			Ca	0.000003	0.000000	No
			Fe	0.000006	0.000000	No
			As	0.001128	0.000000	No

	Element, Wavelength and Order	Date of Fit	Date of Cal.	Type of Fit	Weighting	A0	A1	A2	n (Exponent)
	Ag 328.068 {103}	5/12/2016 9:20:18	5/12/2016 8:41:54	Linear	1/Conc	-0.000718	0.613499	0.000000	1.000000
	Al 396.152 { 85}	5/12/2016 9:20:18	5/12/2016 8:41:54	Linear	1/Conc	-0.009906	0.163189	0.000000	1.000000
	As 189.042 {478}	5/12/2016 9:20:18	5/12/2016 8:41:54	Linear	1/Conc	-0.000366	0.255349	0.000000	1.000000
	Ba 455.403 { 74}	5/12/2016 9:20:18	5/12/2016 8:41:54	Linear	1/Conc	0.014322	13.232095	0.000000	1.000000
	Be 313.042 {108}	5/12/2016 9:20:18	5/12/2016 8:41:54	Linear	1/Conc	0.003421	7.274101	0.000000	1.000000
	Ca 317.933 {106}	5/12/2016 9:20:18	5/12/2016 8:41:54	Linear	1/Conc	0.005235	0.247627	0.000000	1.000000
	Cd 226.502 {449}	5/12/2016 9:20:18	5/12/2016 8:41:54	Linear	1/Conc	0.000034	5.198354	0.000000	1.000000
	Co 228.616 {447}	5/12/2016 9:20:18	5/12/2016 8:41:54	Linear	1/Conc	0.000360	2.476468	0.000000	1.000000
	Cr 267.716 {126}	5/12/2016 9:20:18	5/12/2016 8:41:54	Linear	1/Conc	0.000074	0.436192	0.000000	1.000000
	Cu 324.754 {104}	5/12/2016 9:20:18	5/12/2016 8:41:54	Linear	1/Conc	0.005974	0.668991	0.000000	1.000000
	Fe 259.940 {130}	5/12/2016 9:20:18	5/12/2016 8:41:54	Linear	1/Conc	0.002435	0.143274	0.000000	1.000000
	In 230.606 {446}*	5/12/2016 9:20:18	5/5/2010 12:30:54	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	K 766.490 { 44}	5/12/2016 9:20:18	5/12/2016 8:41:54	Linear	1/Conc	0.009054	0.135561	0.000000	1.000000
	Mg 279.079 {121}	5/12/2016 9:20:18	5/12/2016 8:41:54	Linear	1/Conc	0.000057	0.022420	0.000000	1.000000
	Mn 257.610 {131}	5/12/2016 9:20:18	5/12/2016 8:41:54	Linear	1/Conc	0.000972	2.866302	0.000000	1.000000
	Mo 202.030 {467}	5/12/2016 9:20:18	5/12/2016 8:41:54	Linear	1/Conc	0.000943	1.361745	0.000000	1.000000
	Na 589.592 { 57}	5/12/2016 9:20:18	5/12/2016 8:41:54	Linear	1/Conc	0.008778	0.383873	0.000000	1.000000
	Ni 231.604 {445}	5/12/2016 9:20:18	5/12/2016 8:41:54	Linear	1/Conc	-0.000750	1.690978	0.000000	1.000000
	Pb 220.353 {453}	5/12/2016 9:20:18	5/12/2016 8:41:54	Linear	1/Conc	-0.002076	1.261151	0.000000	1.000000
	Sb 206.833 {463}	5/12/2016 9:20:18	5/12/2016 8:41:54	Linear	1/Conc	0.000370	0.276387	0.000000	1.000000
	Se 196.090 {472}	5/12/2016 9:20:18	5/12/2016 8:41:54	Linear	1/Conc	-0.000335	0.179884	0.000000	1.000000
	Si 212.412 {459}	5/12/2016 9:20:18	5/12/2016 8:41:54	Linear	1/Conc	0.003277	0.519428	0.000000	1.000000
	Sn 189.989 {477}	5/12/2016 9:20:18	5/12/2016 8:41:54	Linear	1/Conc	0.000160	0.582894	0.000000	1.000000
	Sr 407.771 { 83}	5/12/2016 9:20:18	5/12/2016 8:41:54	Linear	1/Conc	0.009855	16.130212	0.000000	1.000000
	Ti 334.941 {101}	5/12/2016 9:20:18	5/12/2016 8:41:54	Linear	1/Conc	0.001113	1.820687	0.000000	1.000000
	Tl 190.856 {477}	5/12/2016 9:20:18	5/12/2016 8:41:54	Linear	1/Conc	-0.003500	0.593168	0.000000	1.000000
	V 292.402 {115}	5/12/2016 9:20:18	5/12/2016 8:41:55	Linear	1/Conc	-0.000074	0.658568	0.000000	1.000000
	Y 224.306 {450}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	Y 360.073 { 94}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	Y 371.030 { 91}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	Zn 206.200 {463}	5/12/2016 9:20:18	5/12/2016 8:41:55	Linear	1/Conc	0.005658	3.297464	0.000000	1.000000

	Element, Wavelength and Order	Correlation	Std Error of Est	Predicted MDL	Predicted MQL	Status	Reslope		QC Norm	
							Slope	Y-int	Slope factor	Offset
	Ag 328.068 {103}	0.999999	0.000009	0.000363	0.001211	OK.	1.000000	0.000000	1	0
	Al 396.152 { 85}	0.999808	0.005155	0.009922	0.033073	OK.	1.000000	0.000000	1	0
	As 189.042 {478}	0.999844	0.000362	0.000611	0.002037	OK.	1.000000	0.000000	1	0
	Ba 455.403 { 74}	0.999956	0.009997	0.000174	0.000581	OK.	1.000000	0.000000	1	0
	Be 313.042 {108}	0.999891	0.008645	0.000083	0.000277	OK.	1.000000	0.000000	1	0
	Ca 317.933 {106}	0.999833	0.007299	0.002986	0.009953	OK.	1.000000	0.000000	1	0
	Cd 226.502 {449}	0.999971	0.003215	0.000045	0.000151	OK.	1.000000	0.000000	1	0
	Co 228.616 {447}	0.999991	0.000845	0.000102	0.000341	OK.	1.000000	0.000000	1	0
	Cr 267.716 {126}	0.999977	0.000239	0.000285	0.000949	OK.	1.000000	0.000000	1	0
	Cu 324.754 {104}	0.999968	0.000428	0.000273	0.000911	OK.	1.000000	0.000000	1	0
	Fe 259.940 {130}	0.999447	0.007677	0.002555	0.008516	OK.	1.000000	0.000000	1	0
	In 230.606 {446}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	K 766.490 { 44}	0.999783	0.004545	0.024038	0.080127	OK.	1.000000	0.000000	1	0
	Mg 279.079 {121}	0.999800	0.000722	0.019721	0.065738	OK.	1.000000	0.000000	1	0
	Mn 257.610 {131}	0.999867	0.003771	0.000041	0.000136	OK.	1.000000	0.000000	1	0
	Mo 202.030 {467}	0.999973	0.000811	0.000119	0.000398	OK.	1.000000	0.000000	1	0
	Na 589.592 { 57}	0.999793	0.012588	0.008384	0.027946	OK.	1.000000	0.000000	1	0
	Ni 231.604 {445}	0.999995	0.000419	0.000151	0.000504	OK.	1.000000	0.000000	1	0
	Pb 220.353 {453}	0.999747	0.002299	0.000465	0.001551	OK.	1.000000	0.000000	1	0
	Sb 206.833 {463}	0.999871	0.000356	0.000905	0.003018	OK.	1.000000	0.000000	1	0
	Se 196.090 {472}	0.999903	0.000202	0.001326	0.004420	OK.	1.000000	0.000000	1	0
	Si 212.412 {459}	0.993425	0.004913	0.000340	0.001134	OK.	1.000000	0.000000	1	0
	Sn 189.989 {477}	0.999823	0.000883	0.000222	0.000741	OK.	1.000000	0.000000	1	0
	Sr 407.771 { 83}	0.999803	0.025809	0.000085	0.000284	OK.	1.000000	0.000000	1	0
	Ti 334.941 {101}	0.999770	0.003144	0.000112	0.000373	OK.	1.000000	0.000000	1	0
	Tl 190.856 {477}	0.999936	0.000518	0.000629	0.002096	OK.	1.000000	0.000000	1	0
	V 292.402 {115}	0.999909	0.000709	0.000243	0.000811	OK.	1.000000	0.000000	1	0
	Y 224.306 {450}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Y 360.073 { 94}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Y 371.030 { 91}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Zn 206.200 {463}	0.999962	0.002317	0.000052	0.000175	OK.	1.000000	0.000000	1	0

Zoom In ▶ Zoom Out

Sample Name: Blank Acquired: 5/13/2016 9:33:21 Type: Cal
Method: 60102007_042011(v107) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.0001**	**-.0016**	**-.0007**	**-.0001**	**.0010**	**.0060**	**-.0008**	**-.0005**	**-.0001**
Stddev	.0002	.0015	.0000	.0013	.0008	.0011	.0000	.0003	.0001
%RSD	199.2	93.33	2.711	1869.	84.01	18.08	4.015	62.08	72.66
#1	-.0002	-.0023	-.0007	.0009	.0015	.0072	-.0008	-.0003	-.0002
#2	-.0001	.0001	-.0007	-.0015	.0000	.0052	-.0008	-.0003	.0000
#3	.0001	-.0027	-.0007	.0004	.0014	.0055	-.0008	-.0008	-.0001

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0055**	**.0008**	**-.0027**	**-.0003**	**.0008**	**.0013**	**-.0088**	**-.0001**	**.0004**
Stddev	.0002	.0005	.0003	.0003	.0001	.0002	.0020	.0003	.0003
%RSD	3.086	61.31	12.10	94.35	7.630	14.34	22.11	353.6	78.86
#1	.0053	.0012	-.0025	.0000	.0008	.0014	-.0083	.0003	.0004
#2	.0056	.0008	-.0030	-.0006	.0008	.0011	-.0110	-.0002	.0007
#3	.0057	.0003	-.0024	-.0002	.0009	.0014	-.0072	-.0003	.0001

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0006**	**-.0003**	**.0036**	**.0004**	**.0014**	**.0020**	**-.0010**	**-.0005**	**.0009**
Stddev	.0002	.0001	.0000	.0001	.0004	.0002	.0001	.0001	.0001
%RSD	24.99	36.41	.4308	34.88	30.98	7.833	14.17	15.28	13.22
#1	.0008	-.0002	.0036	.0003	.0010	.0021	-.0012	-.0006	.0010
#2	.0005	-.0004	.0035	.0005	.0018	.0018	-.0011	-.0005	.0009
#3	.0006	-.0004	.0035	.0005	.0015	.0021	-.0009	-.0004	.0007

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2784.8**	**5178.6**	**41549.**	**3901.1**
Stddev	8.2	24.7	583.	66.8
%RSD	.29621	.47760	1.4040	1.7120
#1	2786.6	5182.9	42221.	3881.5
#2	2792.0	5200.9	41172.	3975.5
#3	2775.8	5152.0	41254.	3846.3

Zoom In ▶ Zoom Out

Sample Name: LowStd Acquired: 5/13/2016 9:37:26 Type: Cal
Method: 60102007_042011(v107) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0322**	**2.065**	**.0823**	**4.219**	**5.070**	**2.180**	**2.302**	**1.258**	**.2586**
Stddev	.0005	.027	.0005	.057	.044	.010	.016	.009	.0025
%RSD	1.678	1.321	.5809	1.346	.8609	.4516	.6877	.6929	.9496
#1	.0316	2.034	.0819	4.153	5.023	2.171	2.284	1.248	.2558
#2	.0322	2.082	.0828	4.247	5.109	2.190	2.315	1.264	.2594
#3	.0327	2.080	.0822	4.256	5.079	2.180	2.306	1.262	.2605

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.4124**	**1.627**	**.9513**	**.2250**	**1.433**	**.5609**	**3.934**	**.7590**	**.3814**
Stddev	.0040	.012	.0099	.0025	.016	.0035	.031	.0057	.0030
%RSD	.9664	.7610	1.045	1.110	1.092	.6316	.7789	.7444	.7761
#1	.4082	1.612	.9454	.2230	1.416	.5569	3.900	.7527	.3785
#2	.4127	1.635	.9628	.2278	1.436	.5633	3.959	.7637	.3844
#3	.4161	1.633	.9457	.2242	1.447	.5627	3.942	.7606	.3813

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.1169**	**.0582**	**.1882**	**.1994**	**8.166**	**1.020**	**.1304**	**.3488**	**1.168**
Stddev	.0002	.0004	.0012	.0011	.088	.009	.0007	.0034	.010
%RSD	.2016	.6694	.6469	.5275	1.075	.9011	.5132	.9829	.8328
#1	.1167	.0578	.1868	.1983	8.065	1.010	.1296	.3450	1.159
#2	.1172	.0585	.1888	.2003	8.223	1.023	.1310	.3500	1.178
#3	.1169	.0584	.1890	.1997	8.211	1.027	.1305	.3515	1.169

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2638.2**	**5156.4**	**41609.**	**3840.1**
Stddev	12.4	25.6	234.	13.7
%RSD	.47172	.49740	.56121	.35647
#1	2652.1	5185.9	41860.	3855.7
#2	2628.1	5140.1	41569.	3830.3
#3	2634.4	5143.1	41398.	3834.3

Zoom In ▶ Zoom Out

Sample Name: MidStd Acquired: 5/13/2016 9:49:26 Type: Cal
Method: 60102007_042011(v107) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.1361**	**9.301**	**.3613**	**18.40**	**22.07**	**9.599**	**9.726**	**5.252**	**1.095**
Stddev	.0007	.025	.0026	.08	.07	.056	.060	.032	.003
%RSD	.5161	.2675	.7246	.4278	.3308	.5801	.6124	.6117	.3095
#1	.1353	9.321	.3641	18.48	22.10	9.625	9.779	5.281	1.094
#2	.1364	9.309	.3609	18.41	22.13	9.636	9.736	5.258	1.092
#3	.1367	9.273	.3590	18.32	21.99	9.535	9.662	5.218	1.098

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1.775**	**6.853**	**4.353**	**1.005**	**6.181**	**2.349**	**18.08**	**3.164**	**1.647**
Stddev	.004	.029	.009	.008	.026	.015	.04	.020	.005
%RSD	.2198	.4215	.2033	.8348	.4259	.6208	.2247	.6374	.2792
#1	1.770	6.848	4.357	1.006	6.174	2.362	18.09	3.183	1.652
#2	1.775	6.883	4.359	1.012	6.158	2.353	18.12	3.165	1.645
#3	1.778	6.826	4.343	.9958	6.210	2.333	18.04	3.143	1.643

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.5064**	**.2543**	**.8596**	**.8173**	**35.15**	**4.390**	**.5600**	**1.483**	**4.931**
Stddev	.0036	.0019	.0051	.0045	.04	.012	.0023	.004	.032
%RSD	.7143	.7333	.5976	.5469	.1279	.2622	.4054	.2962	.6541
#1	.5098	.2559	.8641	.8215	35.18	4.389	.5625	1.484	4.961
#2	.5068	.2549	.8607	.8179	35.18	4.378	.5594	1.479	4.936
#3	.5026	.2522	.8540	.8126	35.10	4.401	.5581	1.487	4.897

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2318.8**	**4754.9**	**38095.**	**3634.1**
Stddev	6.1	20.1	122.	31.4
%RSD	.26433	.42363	.31997	.86295
#1	2312.3	4734.6	38098.	3648.9
#2	2324.5	4755.2	38215.	3598.1
#3	2319.7	4774.9	37971.	3655.5

Zoom In ▶ Zoom Out

Sample Name: HighStd Acquired: 5/13/2016 9:52:49 Type: Cal
Method: 60102007_042011(v107) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.2787**	**18.76**	**.7487**	**37.40**	**44.09**	**19.13**	**19.55**	**10.70**	**2.202**
Stddev	.0001	.17	.0023	.37	.36	.17	.01	.01	.006
%RSD	.0482	.9210	.3045	1.002	.8091	.8768	.0670	.0498	.2654
#1	.2788	18.76	.7461	37.50	44.03	19.00	19.54	10.69	2.206
#2	.2788	18.59	.7503	36.99	43.76	19.07	19.54	10.69	2.195
#3	.2786	18.93	.7498	37.72	44.47	19.32	19.56	10.70	2.204

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3.607**	**12.96**	**8.788**	**2.019**	**11.93**	**4.691**	**36.59**	**6.400**	**3.456**
Stddev	.007	.12	.077	.023	.08	.003	.32	.006	.011
%RSD	.2091	.8980	.8758	1.123	.6734	.0699	.8648	.0988	.3228
#1	3.598	12.92	8.796	2.000	12.03	4.689	36.59	6.393	3.459
#2	3.612	12.87	8.707	2.012	11.87	4.689	36.27	6.402	3.465
#3	3.610	13.10	8.860	2.044	11.91	4.695	36.90	6.406	3.443

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1.053**	**.5246**	**2.179**	**1.605**	**69.25**	**8.492**	**1.161**	**2.943**	**9.883**
Stddev	.002	.0005	.002	.001	.62	.018	.002	.007	.003
%RSD	.1397	.0904	.0879	.0391	.9017	.2081	.1407	.2490	.0289
#1	1.051	.5250	2.178	1.604	69.38	8.476	1.162	2.949	9.883
#2	1.054	.5241	2.177	1.605	68.57	8.511	1.162	2.935	9.886
#3	1.054	.5246	2.181	1.606	69.80	8.490	1.159	2.944	9.880

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2106.6**	**4502.9**	**36749.**	**3546.2**
Stddev	3.5	7.8	139.	35.1
%RSD	.16566	.17370	.37848	.99053
#1	2102.9	4503.7	36673.	3579.1
#2	2106.9	4510.3	36910.	3550.2
#3	2109.9	4494.7	36664.	3509.2

Zoom In Zoom Out

Sample Name: HSTD Acquired: 5/13/2016 9:57:35 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4988**	**80.30**	**4.015**	**4.015**	**4.006**	**80.02**	**3.962**	**3.977**	**3.965**
Stddev	.0019	.43	.019	.017	.028	.60	.009	.007	.009
%RSD	.3832	.5410	.4693	.4312	.6945	.7536	.2392	.1857	.2159
#1	.4990	80.77	4.000	4.034	4.037	80.71	3.955	3.972	3.965
#2	.5006	80.19	4.009	4.012	4.001	79.63	3.959	3.973	3.973
#3	.4968	79.93	4.036	3.999	3.982	79.71	3.973	3.985	3.956
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.996**	**77.95**	**80.57**	**80.27**	**3.924**	**3.951**	**80.73**	**3.967**	**4.034**
Stddev	.010	.61	.58	.61	.022	.007	.52	.013	.009
%RSD	.2584	.7822	.7184	.7652	.5634	.1800	.6389	.3202	.2259
#1	4.004	78.64	81.21	80.98	3.912	3.947	81.21	3.959	4.025
#2	4.000	77.74	80.42	79.89	3.949	3.947	80.79	3.960	4.035
#3	3.985	77.48	80.08	79.94	3.909	3.959	80.18	3.981	4.043
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.018**	**4.015**	**4.325**	**3.916**	**3.950**	**3.912**	**4.017**	**3.946**	**3.960**
Stddev	.009	.009	.008	.007	.012	.035	.008	.014	.014
%RSD	.2192	.2204	.1927	.1746	.3019	.9069	.2008	.3548	.3402
#1	4.016	4.018	4.327	3.911	3.950	3.887	4.009	3.950	3.948
#2	4.011	4.005	4.316	3.914	3.962	3.952	4.024	3.958	3.957
#3	4.028	4.022	4.332	3.924	3.939	3.896	4.019	3.931	3.975
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: HSTD Acquired: 5/13/2016 9:57:35 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2134.4**	**4568.2**	**37155.**	**3548.3**
Stddev	7.6	17.5	285.	47.8
%RSD	.35399	.38286	.76756	1.3482
#1	2134.0	4564.9	37024.	3493.8
#2	2142.2	4587.1	36958.	3568.1
#3	2127.1	4552.6	37482.	3583.1

Zoom In Zoom Out

Sample Name: ICV Acquired: 5/13/2016 10:03:25 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2450**	**40.88**	**1.983**	**2.056**	**2.057**	**41.72**	**2.030**	**2.032**	**2.024**
Stddev	.0002	.12	.005	.004	.002	.12	.003	.003	.001
%RSD	.0886	.2820	.2531	.2029	.0999	.2913	.1396	.1485	.0626
#1	.2448	40.80	1.985	2.056	2.056	41.58	2.033	2.036	2.025
#2	.2452	40.82	1.987	2.052	2.059	41.79	2.029	2.031	2.024
#3	.2451	41.01	1.977	2.060	2.055	41.79	2.028	2.030	2.022
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.978**	**40.44**	**41.54**	**42.06**	**2.083**	**1.898**	**41.92**	**2.041**	**2.017**
Stddev	.003	.05	.13	.29	.004	.000	.10	.003	.005
%RSD	.1271	.1115	.3183	.6928	.1981	.0146	.2476	.1423	.2723
#1	1.980	40.39	41.56	41.75	2.088	1.898	42.03	2.044	2.023
#2	1.977	40.47	41.40	42.33	2.081	1.898	41.82	2.041	2.017
#3	1.975	40.46	41.66	42.10	2.081	1.898	41.92	2.039	2.012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.992**	**2.027**	**.0946**	**2.034**	**1.928**	**1.946**	**2.083**	**1.896**	**2.058**
Stddev	.003	.001	.0001	.002	.004	.002	.002	.005	.005
%RSD	.1246	.0596	.0749	.1194	.2026	.1185	.1051	.2694	.2558
#1	1.993	2.026	.0945	2.034	1.930	1.949	2.083	1.902	2.064
#2	1.994	2.028	.0946	2.036	1.923	1.945	2.081	1.893	2.058
#3	1.989	2.027	.0945	2.031	1.930	1.945	2.085	1.893	2.053
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: ICV Acquired: 5/13/2016 10:03:25 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2316.5**	**4786.0**	**38335.**	**3594.6**
Stddev	2.2	5.5	80.	13.9
%RSD	.09355	.11589	.20765	.38697
#1	2315.1	4787.1	38325.	3608.8
#2	2315.4	4780.0	38261.	3581.0
#3	2319.0	4790.9	38419.	3593.9

Zoom In Zoom Out

Sample Name: ICB Acquired: 5/13/2016 10:10:31 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**.0172**	**.0006**	**.0007**	**.0002**	**.0040**	**.0000**	**.0000**	**.0000**
Stddev	.0000	.0020	.0007	.0001	.0000	.0021	.0000	.0000	.000
%RSD	35.76	11.90	128.2	15.54	9.650	51.35	231.1	99.88	751.6
#1	-.0001	.0159	.0009	.0007	.0002	.0025	.0000	.0001	.0002
#2	-.0002	.0195	-.0003	.0009	.0003	.0064	.0000	.0000	.0001
#3	-.0001	.0161	.0011	.0007	.0002	.0032	.0000	.0000	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0101**	**.0386**	**.0152**	**.0000**	**.0006**	**.0011**	**-.0001**	**.0001**
Stddev	.0003	.0036	.0393	.0271	.0000	.0003	.0079	.0001	.0004
%RSD	89.95	36.22	102.0	178.6	92.12	44.18	730.5	78.48	668.5
#1	.0006	.0121	-.0013	-.0116	.0001	.0009	-.0074	.0000	.0000
#2	.0001	.0122	.0397	.0425	.0000	.0006	.0025	-.0002	.0005
#3	.0003	.0059	.0773	.0146	.0000	.0003	.0082	-.0002	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0008**	**.0018**	**.0004**	**.0004**	**.0001**	**.0004**	**-.0008**	**-.0002**	**-.0001**
Stddev	.0012	.0008	.0004	.0002	.0001	.0001	.0003	.0002	.0001
%RSD	162.8	45.62	91.52	61.48	41.60	28.19	42.88	98.55	65.92
#1	-.0005	.0028	.0005	.0006	.0002	.0005	-.0006	-.0003	-.0001
#2	.0009	.0014	.0008	.0003	.0001	.0004	-.0012	.0000	.0000
#3	.0019	.0013	.0000	.0002	.0001	.0003	-.0006	-.0002	-.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: ICB Acquired: 5/13/2016 10:10:31 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2730.6**	**5097.5**	**40035.**	**3541.8**
Stddev	6.5	10.5	565.	9.2
%RSD	.23718	.20659	1.4105	.26066
#1	2723.2	5086.7	39408.	3548.7
#2	2734.3	5107.8	40504.	3545.4
#3	2734.4	5098.0	40193.	3531.3

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/13/2016 10:14:16 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0087**	**.2260**	**.0111**	**.2067**	**.0052**	**1.084**	**.0053**	**.0534**	**.0109**
Stddev	.0004	.0041	.0006	.0007	.0001	.010	.0000	.0001	.0001
%RSD	4.897	1.818	5.299	.3415	1.905	.9633	.5433	.2693	1.274
#1	.0088	.2304	.0107	.2073	.0053	1.083	.0053	.0533	.0110
#2	.0091	.2223	.0107	.2068	.0051	1.075	.0053	.0534	.0107
#3	.0083	.2253	.0117	.2059	.0053	1.095	.0052	.0536	.0110
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0268**	**.3234**	**10.24**	**5.433**	**.0167**	**.0492**	**10.33**	**.0431**	**.0047**
Stddev	.0002	.0015	.05	.024	.0001	.0000	.03	.0004	.0009
%RSD	.5636	.4499	.4631	.4438	.4415	.0599	.3231	.9044	18.92
#1	.0267	.3223	10.29	5.414	.0168	.0492	10.36	.0429	.0054
#2	.0270	.3229	10.23	5.426	.0166	.0493	10.31	.0435	.0049
#3	.0268	.3251	10.20	5.460	.0168	.0492	10.30	.0428	.0037
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0050**	**.0108**	**.0419**	**.0541**	**.0102**	**.0104**	**.0098**	**.0496**	**.0228**
Stddev	.0004	.0011	.0001	.0003	.0000	.0000	.0006	.0002	.0001
%RSD	8.900	10.21	.2261	.5506	.1884	.4692	6.384	.4313	.5532
#1	.0045	.0095	.0419	.0542	.0102	.0104	.0092	.0494	.0227
#2	.0050	.0116	.0420	.0544	.0102	.0104	.0099	.0494	.0229
#3	.0054	.0113	.0418	.0538	.0102	.0104	.0104	.0498	.0228
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/13/2016 10:14:16 Type: QC
Method: 60102007_042011(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2628.8**	**5075.6**	**39511.**	**3603.5**
Stddev	7.1	10.1	59.	7.2
%RSD	.27052	.19957	.15050	.20076
#1	2623.4	5075.0	39449.	3606.7
#2	2626.2	5065.7	39517.	3595.3
#3	2636.9	5085.9	39567.	3608.7

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/13/2016 10:20:12 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0007**	**522.8**	**.0004**	**-.0005**	**.0001**	**508.2**	**.0000**	**-.0003**	**-.0005**
Stddev	.0001	1.6	.0012	.0005	.0001	2.2	.000	.0000	.0001
%RSD	19.28	.2967	306.5	110.5	195.7	.4345	830.8	15.41	18.48
#1	.0008	523.2	.0016	.0000	.0000	510.8	.0000	-.0002	-.0005
#2	.0008	521.1	.0003	-.0010	.0000	506.7	-.0001	-.0003	-.0005
#3	.0005	524.1	-.0008	-.0004	.0002	507.2	.0001	-.0003	-.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0020**	**185.4**	**.0489**	**546.1**	**-.0003**	**-.0003**	**.1889**	**-.0008**	**.0001**
Stddev	.0003	.4	.0090	2.6	.0001	.0002	.0199	.0003	.0004
%RSD	15.00	.1948	18.46	.4709	21.26	70.08	10.53	33.09	752.5
#1	-.0022	185.7	.0505	549.0	-.0003	-.0003	.1672	-.0007	.0005
#2	-.0021	185.5	.0391	544.1	-.0002	-.0001	.1932	-.0007	-.0002
#3	-.0016	185.0	.0569	545.1	-.0003	-.0005	.2064	-.0011	-.0002
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0014**	**.0000**	**.0094**	F **.0015**	**-.0002**	**.0002**	**-.0005**	**-.0007**	**-.0036**
Stddev	.0017	.002	.0008	.0001	.0001	.0001	.0006	.0003	.0002
%RSD	122.1	9965.	8.037	8.283	75.02	35.57	116.6	41.31	5.906
#1	.0023	-.0028	.0101	.0015	-.0003	.0003	-.0001	-.0008	-.0034
#2	-.0006	.0014	.0093	.0014	.0000	.0002	-.0012	-.0004	-.0035
#3	.0025	.0013	.0086	.0016	-.0003	.0002	-.0002	-.0010	-.0038
Check ?	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.0010					
Low Limit				-.0010					

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/13/2016 10:20:12 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2109.1**	**4600.7**	**34644.**	**3341.1**
Stddev	2.1	.6	507.	14.4
%RSD	.09736	.01295	1.4631	.43019
#1	2106.9	4601.3	34310.	3327.4
#2	2111.0	4600.2	34395.	3356.1
#3	2109.6	4600.4	35227.	3340.0

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 5/13/2016 10:25:43 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.072**	**519.5**	**1.084**	**.5379**	**.5174**	**504.2**	**.9670**	**.4833**	**.5174**
Stddev	.003	6.7	.002	.0018	.0009	4.8	.0012	.0007	.0021
%RSD	.2888	1.281	.1881	.3272	.1794	.9526	.1238	.1367	.4092
#1	1.068	511.9	1.085	.5359	.5185	500.7	.9658	.4836	.5155
#2	1.073	524.5	1.081	.5388	.5172	502.4	.9670	.4825	.5197
#3	1.074	522.0	1.085	.5391	.5166	509.7	.9682	.4837	.5171
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5563**	**185.8**	**.0547**	**535.1**	**.5115**	**.9551**	**.2446**	**.9572**	**.9851**
Stddev	.0015	.5	.0380	3.8	.0014	.0023	.0052	.0005	.0011
%RSD	.2703	.2936	69.44	.7016	.2746	.2388	2.109	.0518	.1078
#1	.5570	185.7	.0110	534.7	.5104	.9537	.2389	.9567	.9844
#2	.5545	185.4	.0798	531.5	.5131	.9540	.2490	.9575	.9847
#3	.5572	186.4	.0733	539.0	.5111	.9578	.2459	.9576	.9863
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.024**	**1.024**	**.1201**	**.9532**	**1.032**	**1.003**	**.9669**	**.4719**	**.9553**
Stddev	.003	.004	.0007	.0014	.001	.001	.0029	.0014	.0023
%RSD	.3242	.3845	.5699	.1442	.1227	.1368	.3038	.2951	.2366
#1	1.025	1.029	.1202	.9521	1.034	1.002	.9639	.4707	.9540
#2	1.020	1.024	.1194	.9527	1.031	1.004	.9669	.4734	.9540
#3	1.026	1.021	.1207	.9548	1.032	1.002	.9698	.4715	.9579
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 5/13/2016 10:25:43 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1994.0**	**4380.6**	**34378.**	**3364.2**
Stddev	3.8	4.8	83.	19.1
%RSD	.19266	.11055	.24170	.56915
#1	1998.5	4386.1	34350.	3380.9
#2	1991.7	4376.9	34312.	3368.3
#3	1991.9	4378.9	34471.	3343.3

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/13/2016 10:33:11 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2506	40.20	1.925	2.023	1.972	41.06	1.982	1.985	1.999
Stddev	.0003	.13	.001	.011	.004	.05	.002	.002	.007
%RSD	.1124	.3283	.0742	.5614	.2208	.1268	.1113	.1143	.3338
#1	.2508	40.26	1.926	2.032	1.975	41.00	1.984	1.987	2.001
#2	.2508	40.05	1.924	2.010	1.967	41.08	1.980	1.984	2.003
#3	.2503	40.30	1.926	2.026	1.973	41.10	1.983	1.983	1.991
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.996	41.18	39.32	40.61	2.009	2.006	39.43	1.956	1.967
Stddev	.002	.09	.27	.08	.005	.002	.20	.002	.001
%RSD	.1082	.2130	.6849	.2012	.2601	.0806	.4984	.0884	.0474
#1	1.997	41.24	39.60	40.51	2.006	2.008	39.61	1.956	1.968
#2	1.997	41.08	39.06	40.66	2.015	2.005	39.22	1.954	1.966
#3	1.993	41.21	39.31	40.65	2.005	2.006	39.46	1.957	1.968
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.920	1.946	1.693	2.050	1.978	1.998	1.969	1.987	1.959
Stddev	.000	.004	.002	.003	.014	.004	.007	.003	.003
%RSD	.0059	.1953	.1135	.1635	.6908	.2031	.3535	.1474	.1625
#1	1.920	1.950	1.695	2.053	1.989	1.995	1.972	1.984	1.958
#2	1.921	1.942	1.692	2.050	1.963	2.003	1.961	1.990	1.957
#3	1.920	1.946	1.692	2.047	1.983	1.997	1.974	1.987	1.963
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/13/2016 10:33:11 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2308.0	4836.9	38455.	3605.4
Stddev	6.7	8.5	111.	13.8
%RSD	.29195	.17674	.28948	.38373
#1	2302.8	4829.4	38579.	3620.6
#2	2305.7	4835.0	38363.	3593.6
#3	2315.6	4846.2	38424.	3601.9

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/13/2016 10:40:05 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0191	.0009	.0004	.0001	.0131	.0000	.0000	.0001
Stddev	.0003	.0019	.0006	.0002	.0001	.0034	.0000	.0001	.0002
%RSD	267.4	9.992	62.01	46.58	41.73	26.15	17.78	528.9	257.1
#1	.0004	.0202	.0014	.0003	.0001	.0151	.0000	.0002	.0001
#2	.0001	.0169	.0010	.0003	.0002	.0092	.0000	.0000	-.0001
#3	-.0002	.0201	.0003	.0007	.0001	.0151	.0000	-.0001	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0087	-.0088	.0050	.0001	.0001	.0291	.0000	-.0005
Stddev	.0002	.0033	.0405	.0102	.0000	.0001	.0058	.0000	.0004
%RSD	248.1	38.25	462.3	206.5	55.60	74.24	19.78	37.93	80.22
#1	.0002	.0111	.0364	.0122	.0001	.0001	.0304	.0000	-.0001
#2	-.0002	.0049	-.0418	-.0067	.0000	.0003	.0341	.0000	-.0005
#3	.0002	.0100	-.0209	.0094	.0001	.0000	.0228	.0000	-.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0013	.0015	.0005	.0001	.0001	.0000	-.0001	-.0001	.0003
Stddev	.0003	.0006	.0004	.0002	.0001	.0000	.0007	.0000	.0001
%RSD	21.50	43.12	74.91	304.4	54.29	340.5	717.8	6.594	35.39
#1	.0013	.0012	.0006	.0002	.0002	.0000	-.0006	-.0001	.0004
#2	.0016	.0022	.0009	-.0002	.0001	.0000	.0007	-.0002	.0004
#3	.0011	.0010	.0001	.0002	.0001	.0000	-.0004	-.0002	.0002
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/13/2016 10:40:05 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2727.4	5141.9	41006.	3698.6
Stddev	1.9	16.1	242.	29.6
%RSD	.07068	.31282	.58942	.80009
#1	2726.7	5126.5	40942.	3732.2
#2	2729.6	5140.7	41273.	3676.2
#3	2725.9	5158.6	40802.	3687.6

Zoom In Zoom Out

Sample Name: FA33697-1 Acquired: 5/13/2016 10:44:07 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 50.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	**.0022**	**20.00**	**1.187**	**.4857**	**-.0013**	**184.6**	**.1445**	**1.268**
Stddev	.0132	.21	.036	.0040	.0038	.9	.0097	.010
%RSD	604.0	1.039	3.020	.8196	294.9	.5051	6.746	.8073
#1	-.0104	19.88	1.219	.4892	-.0004	185.2	.1503	1.263
#2	.0159	20.24	1.148	.4814	.0020	183.5	.1332	1.261
#3	.0010	19.87	1.193	.4866	-.0055	185.0	.1499	1.280

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	**10.27**	**11.34**	**11520.**	**5.362**	**6.001**	**74.30**	**2.111**	**5.576**
Stddev	.04	.05	40.	.572	1.815	.14	.015	.531
%RSD	.3588	.4594	.3451	10.67	30.25	.1893	.7061	9.527
#1	10.25	11.36	11560.	5.882	7.287	74.15	2.106	5.807
#2	10.31	11.28	11490.	5.455	6.791	74.34	2.099	5.953
#3	10.24	11.37	11500.	4.749	3.924	74.42	2.128	4.969

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	**4.783**	F **206.2**	**.4034**	F **-.5078**	**4.276**	**1.119**	**1.009**	**2.076**
Stddev	.013	1.1	.0358	.0281	.007	.013	.006	.035
%RSD	.2762	.5144	8.881	5.527	.1604	1.141	.6429	1.683
#1	4.790	205.9	.3857	-.5312	4.269	1.132	1.008	2.036
#2	4.768	207.3	.4446	-.4767	4.277	1.107	1.003	2.100
#3	4.792	205.2	.3799	-.5155	4.283	1.117	1.016	2.093

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0377**	**.2305**	**38.71**
Stddev	.0290	.0025	.22
%RSD	76.77	1.064	.5709
#1	.0332	.2300	38.61
#2	.0113	.2283	38.97
#3	.0687	.2331	38.56

Zoom In Zoom Out

Sample Name: FA33697-1 Acquired: 5/13/2016 10:44:07 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 50.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2635.1**	**4970.2**	**39221.**	**3653.5**
Stddev	19.1	54.2	59.	16.9
%RSD	.72569	1.0898	.15081	.46128
#1	2614.9	4923.6	39288.	3638.8
#2	2652.9	5029.6	39202.	3649.9
#3	2637.4	4957.3	39174.	3671.9

Zoom In Zoom Out

Sample Name: FA33720-1 Acquired: 5/13/2016 10:48:27 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 4.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0002**	**287.1**	**.1549**	**2.637**	**.0201**	**1728.**	**.0088**	**.1016**	**.2217**
Stddev	.0009	.8	.0010	.007	.0002	7.	.0003	.0001	.0013
%RSD	454.7	.2858	.6404	.2533	.9734	.3923	3.871	.1327	.6071
#1	-.0009	286.4	.1540	2.630	.0202	1723.	.0091	.1017	.2218
#2	-.0004	287.0	.1547	2.642	.0199	1736.	.0084	.1014	.2204
#3	.0008	288.0	.1560	2.640	.0202	1726.	.0088	.1016	.2230

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.4931**	**285.2**	**52.24**	**247.0**	**5.021**	**.0042**	**1.893**	**.2231**	**1.319**
Stddev	.0015	1.3	.24	.8	.009	.0002	.022	.0002	.003
%RSD	.3054	.4567	.4681	.3438	.1702	4.063	1.182	.0916	.1914
#1	.4914	283.8	51.96	246.3	5.031	.0044	1.867	.2230	1.317
#2	.4935	285.7	52.34	246.7	5.017	.0041	1.909	.2233	1.322
#3	.4944	286.2	52.41	247.9	5.015	.0041	1.902	.2229	1.319

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0019**	**.0073**	**4.601**	**.0284**	**2.149**	**4.053**	**-.0005**	**.3986**	**.9546**
Stddev	.0031	.0052	.010	.0013	.010	.002	.0049	.0004	.0007
%RSD	160.2	71.31	.2264	4.565	.4509	.0455	1038.	.0961	.0733
#1	-.0026	.0091	4.601	.0292	2.140	4.051	.0037	.3984	.9546
#2	-.0046	.0115	4.590	.0269	2.149	4.055	.0007	.3983	.9553
#3	.0014	.0014	4.611	.0291	2.159	4.053	-.0059	.3990	.9539

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2220.3**	**5438.9**	**42836.**	**4024.1**
Stddev	2.2	15.6	57.	34.0
%RSD	.09978	.28684	.13217	.84586
#1	2218.7	5432.9	42771.	4061.5
#2	2219.4	5456.6	42875.	4016.0
#3	2222.9	5427.1	42863.	3994.9

Zoom In Zoom Out

Sample Name: FA33720-2 Acquired: 5/13/2016 10:52:55 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0011**	**133.3**	**.1220**	**1.391**	**.0257**	**412.4**	**.0029**	**.1128**	**.1690**
Stddev	.0004	.9	.0033	.009	.0003	2.8	.0002	.0006	.0008
%RSD	32.99	.6520	2.741	.6572	1.253	.6741	5.876	.4979	.4548
#1	-.0009	133.9	.1188	1.399	.0258	414.3	.0030	.1123	.1687
#2	-.0015	133.8	.1255	1.393	.0259	413.6	.0030	.1127	.1699
#3	-.0009	132.3	.1217	1.381	.0253	409.2	.0027	.1134	.1685

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.2219**	**399.8**	**42.63**	**178.7**	**6.681**	**.0070**	**2.322**	**.2028**	**.3739**
Stddev	.0015	1.9	.20	1.3	.021	.0005	.031	.0011	.0019
%RSD	.6806	.4722	.4619	.7377	.3140	7.461	1.329	.5343	.5193
#1	.2235	401.3	42.75	179.2	6.657	.0064	2.355	.2022	.3724
#2	.2215	400.5	42.73	179.6	6.697	.0074	2.317	.2021	.3733
#3	.2205	397.7	42.40	177.1	6.687	.0071	2.294	.2040	.3761

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0018**	**-.0105**	**4.202**	**.0278**	**.3784**	**6.059**	**-.0063**	**.4889**	**1.239**
Stddev	.0038	.0110	.012	.0008	.0013	.007	.0042	.0013	.002
%RSD	214.6	104.6	.2946	2.787	.3480	.1160	66.55	.2717	.1212
#1	.0004	-.0080	4.195	.0285	.3790	6.051	-.0026	.4889	1.240
#2	.0004	-.0010	4.194	.0270	.3794	6.062	-.0109	.4876	1.237
#3	-.0061	-.0226	4.216	.0277	.3769	6.064	-.0056	.4903	1.239

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2438.3**	**6003.5**	**47816.**	**4465.8**
Stddev	3.1	3.6	204.	46.9
%RSD	.12634	.05975	.42719	1.0511
#1	2435.6	6000.4	48050.	4442.6
#2	2437.7	6007.4	47672.	4434.9
#3	2441.6	6002.6	47727.	4519.8

Zoom In Zoom Out

Sample Name: FA33857-1 Acquired: 5/13/2016 10:57:14 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0045**	**9.038**	**.0174**	F **116.7**	**.0023**	**1301.**	**.0181**	**.0481**	**.8039**
Stddev	.0040	.131	.0007	.5	.0004	4.	.0005	.0016	.0044
%RSD	86.90	1.446	3.883	.4638	17.67	.3225	2.831	3.370	.5532
#1	.0045	9.009	.0181	116.1	.0019	1304.	.0186	.0485	.8029
#2	.0006	9.180	.0168	117.1	.0026	1301.	.0182	.0495	.8001
#3	.0085	8.924	.0174	116.8	.0025	1296.	.0176	.0463	.8088

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.1449**	**39.40**	**.3308**	**12.19**	**.4881**	**.0004**	**6.310**	**.0260**	**3.341**
Stddev	.0008	.14	.2401	.30	.0027	.0009	.070	.0010	.034
%RSD	.5453	.3432	72.58	2.496	.5620	224.0	1.117	3.919	1.014
#1	.1457	39.53	.5042	12.02	.4887	.0010	6.238	.0249	3.370
#2	.1441	39.42	.4313	12.54	.4851	.0009	6.378	.0270	3.350
#3	.1449	39.26	.0568	12.01	.4905	-.0007	6.313	.0262	3.304

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0175**	**.0120**	**1.747**	**-.0089**	**4.593**	F **47.19**	**.0007**	**.0761**	**.6802**
Stddev	.0101	.0028	.008	.0029	.005	.22	.0017	.0015	.0017
%RSD	57.68	23.57	.4707	32.43	.1133	.4763	253.6	1.949	.2476
#1	-.0073	.0135	1.757	-.0100	4.592	47.37	-.0012	.0767	.6807
#2	-.0176	.0088	1.744	-.0056	4.588	46.94	.0013	.0745	.6816
#3	-.0275	.0139	1.741	-.0110	4.599	47.26	.0019	.0773	.6783

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2450.7**	**4958.6**	**39161.**	**3636.1**
Stddev	2.4	16.9	100.	2.7
%RSD	.09820	.34104	.25589	.07513
#1	2450.0	4940.0	39075.	3633.0
#2	2448.7	4962.8	39271.	3638.0
#3	2453.4	4973.1	39136.	3637.4

Zoom In Zoom Out

Sample Name: FA33756-5 Acquired: 5/13/2016 11:01:52 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0632**	**55.59**	**.0911**	**2.607**	**.0737**	**29.86**	**.0167**	**.1078**	**.9057**
Stddev	.0038	.23	.0022	.016	.0005	.17	.0006	.0012	.0039
%RSD	6.051	.4141	2.403	.6016	.6504	.5697	3.519	1.085	.4264
#1	.0620	55.39	.0888	2.619	.0742	29.73	.0167	.1073	.9028
#2	.0601	55.84	.0911	2.611	.0734	30.05	.0172	.1091	.9101
#3	.0675	55.53	.0932	2.589	.0734	29.78	.0161	.1069	.9042

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**2.348**	**85.17**	**13.81**	**7.507**	**1.936**	**.0540**	**2.416**	**.7250**	**.2406**
Stddev	.007	.27	.21	.090	.007	.0008	.039	.0008	.0106
%RSD	.3052	.3186	1.495	1.200	.3698	1.396	1.629	.1068	4.421
#1	2.350	85.48	14.01	7.403	1.929	.0544	2.385	.7243	.2318
#2	2.354	85.09	13.81	7.569	1.943	.0531	2.461	.7258	.2524
#3	2.340	84.95	13.60	7.547	1.935	.0545	2.404	.7250	.2375

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0036**	**.0016**	**1.147**	**.2449**	**6.728**	F **45.18**	**-.0404**	**.2199**	**4.315**
Stddev	.0080	.0131	.005	.0034	.029	.22	.0031	.0001	.005
%RSD	221.4	835.9	.4029	1.387	.4309	.4790	7.775	.0458	.1109
#1	.0082	.0080	1.152	.2447	6.757	45.30	-.0415	.2200	4.313
#2	.0082	.0102	1.143	.2416	6.699	45.30	-.0368	.2200	4.311
#3	-.0056	-.0135	1.146	.2484	6.727	44.93	-.0428	.2198	4.320

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2656.4**	**6110.1**	**48331.**	**4331.2**
Stddev	7.8	10.0	124.	12.8
%RSD	.29211	.16436	.25715	.29521
#1	2664.8	6108.1	48374.	4345.6
#2	2655.0	6121.0	48191.	4321.3
#3	2649.4	6101.3	48428.	4326.6

Zoom In Zoom Out

Sample Name: FA33756-6 Acquired: 5/13/2016 11:06:21 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 4.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	**1.098**	**3.904**	**.0102**	**.1142**	**-.0002**	**4.186**	**-.0088**	**.0290**
Stddev	.005	.047	.0024	.0007	.0003	.017	.0001	.0001
%RSD	.4502	1.193	24.10	.5984	136.1	.3975	.7190	.4337
#1	1.096	3.898	.0074	.1137	.0001	4.167	-.0087	.0290
#2	1.104	3.952	.0110	.1150	-.0003	4.197	-.0088	.0289
#3	1.095	3.860	.0120	.1140	-.0004	4.194	-.0088	.0291

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	F **18.68**	**.0229**	**6.552**	**.0463**	**.2667**	**.1122**	**.0061**	**.2569**
Stddev	.06	.0003	.013	.0484	.0459	.0000	.0003	.0039
%RSD	.3318	1.180	.2038	104.6	17.19	.0431	4.170	1.526
#1	18.61	.0227	6.538	.0311	.2138	.1122	.0060	.2541
#2	18.71	.0230	6.565	.0073	.2939	.1122	.0064	.2552
#3	18.72	.0232	6.554	.1006	.2925	.1123	.0059	.2614

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	F **90.25**	**.0184**	F **-.0465**	**.0090**	**.6531**	**.0126**	**.0467**	**1.189**
Stddev	.25	.0020	.0051	.0063	.0021	.0010	.0003	.003
%RSD	.2724	10.66	10.89	70.16	.3201	7.676	.6274	.2857
#1	90.53	.0176	-.0410	.0162	.6515	.0125	.0466	1.185
#2	90.09	.0207	-.0510	.0047	.6523	.0136	.0470	1.191
#3	90.13	.0170	-.0473	.0060	.6555	.0117	.0464	1.192

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0055**	**.0890**	**.0522**
Stddev	.0017	.0004	.0003
%RSD	31.52	.4857	.5903
#1	-.0050	.0894	.0522
#2	-.0074	.0888	.0518
#3	-.0040	.0886	.0524

Zoom In Zoom Out

Sample Name: FA33756-6 Acquired: 5/13/2016 11:06:21 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 4.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2672.8**	**5022.3**	**40943.**	**3662.0**
Stddev	6.9	16.9	168.	29.8
%RSD	.25989	.33678	.41093	.81418
#1	2665.3	5005.6	41136.	3696.2
#2	2679.0	5039.4	40865.	3641.3
#3	2674.1	5022.0	40827.	3648.6

Zoom In Zoom Out

Sample Name: FA33857-1 Acquired: 5/13/2016 11:10:45 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 20.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0095**	**9.897**	**.0322**	**F 176.6**	**.0033**	**1355.**	**.0178**	**.0478**	**.8366**
Stddev	.0102	.292	.0191	2.4	.0021	2.	.0004	.0046	.0007
%RSD	108.0	2.950	59.38	1.367	65.35	.1431	2.487	9.618	.0853
#1	.0030	10.00	.0216	179.4	.0050	1355.	.0179	.0532	.8362
#2	.0213	10.12	.0543	175.6	.0009	1353.	.0182	.0452	.8362
#3	.0042	9.567	.0208	174.9	.0040	1357.	.0173	.0452	.8374

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.1464**	**40.71**	**.4119**	**12.74**	**.4986**	**-.0070**	**6.567**	**.0399**	**3.381**
Stddev	.0029	.23	.2286	.83	.0008	.0013	.103	.0064	.036
%RSD	2.008	.5666	55.49	6.537	.1547	19.26	1.566	16.00	1.074
#1	.1431	40.51	.1489	12.70	.4978	-.0084	6.660	.0460	3.416
#2	.1472	40.66	.5619	11.93	.4993	-.0067	6.457	.0405	3.384
#3	.1488	40.96	.5251	13.59	.4985	-.0057	6.585	.0332	3.344

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0233**	**.0121**	**3.266**	**-.0109**	**5.045**	**51.52**	**-.0010**	**.0790**	**.8199**
Stddev	.0215	.0363	.015	.0064	.022	.16	.0432	.0027	.0075
%RSD	92.14	301.0	.4620	59.23	.4466	.3104	4429.	3.398	.9143
#1	-.0042	-.0158	3.249	-.0111	5.022	51.53	-.0434	.0819	.8218
#2	-.0465	-.0011	3.273	-.0172	5.067	51.68	.0430	.0767	.8262
#3	-.0191	.0531	3.277	-.0043	5.046	51.36	-.0024	.0782	.8116

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2515.9**	**4982.7**	**39346.**	**3586.5**
Stddev	16.8	32.3	91.	22.1
%RSD	.66594	.64764	.23099	.61503
#1	2504.1	4964.9	39408.	3590.6
#2	2508.6	4963.3	39241.	3606.2
#3	2535.1	5020.0	39388.	3562.7

Zoom In Zoom Out

Sample Name: MP30353-MB1 Acquired: 5/13/2016 11:15:18 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0003**	**.0068**	**-.0002**	**.0009**	**-.0002**	**.0041**	**-.0001**	**-.0001**	**.0000**
Stddev	.0000	.0105	.0010	.0004	.0000	.0026	.0000	.0001	.0001
%RSD	3.632	153.3	471.4	41.44	6.929	62.81	11.85	66.41	245.3
#1	-.0003	-.0037	-.0013	.0009	-.0002	.0054	-.0001	-.0002	.0000
#2	-.0003	.0172	.0000	.0005	-.0002	.0011	-.0001	-.0002	.0002
#3	-.0003	.0071	.0007	.0013	-.0002	.0058	-.0001	.0000	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0038**	**-.0206**	**-.0045**	**-.0001**	**-.0005**	**.0303**	**-.0001**	**-.0004**
Stddev	.0001	.0023	.0354	.0175	.0000	.0001	.0112	.0001	.0005
%RSD	37.80	60.11	171.7	389.2	19.85	21.65	37.00	209.6	139.4
#1	.0003	.0042	.0037	-.0018	-.0001	-.0004	.0322	-.0002	-.0010
#2	.0001	.0058	-.0043	-.0232	-.0001	-.0005	.0183	.0000	-.0003
#3	.0003	.0013	-.0613	.0115	-.0002	-.0006	.0405	.0001	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0002**	**.0079**	**.0002**	**.0000**	**.0015**	**-.0012**	**-.0004**	**-.0001**
Stddev	.0005	.0010	.0002	.0003	.000	.0002	.0012	.0001	.0001
%RSD	151.9	553.3	3.021	107.4	238.6	11.34	97.20	36.28	91.30
#1	.0004	.0012	.0080	.0000	.0000	.0017	-.0010	-.0003	-.0002
#2	-.0002	.0001	.0077	.0003	-.0001	.0015	-.0002	-.0005	-.0001
#3	.0008	-.0008	.0081	.0005	.0000	.0014	-.0025	-.0003	.0000
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: MP30353-MB1 Acquired: 5/13/2016 11:15:18 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2677.0**	**5083.4**	**40795.**	**3622.2**
Stddev	2.9	5.9	55.	18.1
%RSD	.10840	.11607	.13385	.50010
#1	2678.8	5082.2	40735.	3603.9
#2	2678.6	5089.8	40842.	3622.5
#3	2673.7	5078.2	40807.	3640.1

Zoom In Zoom Out

Sample Name: MP30353-B1 Acquired: 5/13/2016 11:19:49 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0486**	**28.01**	**1.932**	**2.170**	**.0527**	**27.34**	**.0508**	**.5142**	**.2094**
Stddev	.0005	.10	.001	.003	.0001	.11	.0002	.0003	.0007
%RSD	1.046	.3438	.0358	.1184	.2280	.3904	.3035	.0612	.3420
#1	.0487	28.10	1.933	2.172	.0528	27.41	.0507	.5140	.2086
#2	.0490	27.90	1.932	2.167	.0526	27.22	.0510	.5141	.2096
#3	.0480	28.02	1.932	2.170	.0526	27.39	.0507	.5146	.2099
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2656**	**26.65**	**25.06**	**26.54**	**.5219**	**.4926**	**25.23**	**.5059**	**.4939**
Stddev	.0007	.08	.05	.16	.0013	.0006	.02	.0003	.0017
%RSD	.2622	.2959	.1798	.6197	.2540	.1293	.0661	.0523	.3342
#1	.2648	26.72	25.02	26.71	.5205	.4923	25.22	.5059	.4921
#2	.2661	26.56	25.11	26.38	.5223	.4922	25.22	.5057	.4942
#3	.2660	26.65	25.07	26.54	.5230	.4933	25.25	.5062	.4954
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4927**	**1.986**	**.0231**	**.5195**	**.4866**	**.4911**	**1.983**	**.4765**	**.4967**
Stddev	.0004	.003	.0002	.0002	.0002	.0008	.002	.0008	.0002
%RSD	.0819	.1306	1.009	.0429	.0371	.1629	.0801	.1595	.0441
#1	.4929	1.989	.0234	.5197	.4868	.4902	1.984	.4774	.4969
#2	.4923	1.984	.0230	.5192	.4865	.4915	1.981	.4759	.4966
#3	.4930	1.985	.0229	.5195	.4866	.4917	1.983	.4763	.4965
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: MP30353-B1 Acquired: 5/13/2016 11:19:49 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2415.2**	**4919.2**	**38988.**	**3519.7**
Stddev	.3	5.4	110.	18.4
%RSD	.01428	.11019	.28169	.52204
#1	2415.3	4920.6	39040.	3504.0
#2	2414.8	4913.2	39062.	3539.9
#3	2415.5	4923.7	38862.	3515.1

Zoom In Zoom Out

Sample Name: FA33679-3 Acquired: 5/13/2016 11:24:01 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0023**	**.1631**	**4.812**	**4.249**	**.0002**	**189.2**	**-.0023**	**.0019**	**.0016**
Stddev	.0027	.0212	.034	.003	.0004	.7	.0005	.0006	.0005
%RSD	117.2	12.99	.7091	.0789	180.7	.3465	20.58	33.15	29.02
#1	.0001	.1859	4.848	4.253	.0004	189.9	-.0018	.0012	.0011
#2	-.0018	.1440	4.781	4.249	.0004	189.2	-.0028	.0020	.0020
#3	-.0053	.1595	4.806	4.246	-.0002	188.6	-.0025	.0024	.0015

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0023**	**270.7**	**5.089**	**47.30**	**.0357**	**.0438**	**128.7**	**.0080**	**-.0147**
Stddev	.0001	1.4	.081	.57	.0003	.0008	.5	.0005	.0004
%RSD	4.042	.5018	1.599	1.199	.8907	1.715	.4210	6.009	2.927
#1	.0022	272.3	5.183	47.90	.0360	.0430	129.3	.0086	-.0152
#2	.0024	269.9	5.037	47.23	.0354	.0444	128.6	.0077	-.0145
#3	.0022	270.0	5.049	46.78	.0358	.0441	128.2	.0078	-.0145

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0007**	**-.0038**	**15.08**	**.0016**	**.9610**	**.0048**	**.0023**	**.0186**	**.0337**
Stddev	.0013	.0058	.06	.0008	.0022	.0003	.0058	.0008	.0004
%RSD	175.0	153.4	.3694	48.50	.2247	6.323	257.5	4.149	1.187
#1	.0022	-.0095	15.13	.0023	.9624	.0051	-.0044	.0195	.0341
#2	.0000	.0022	15.02	.0018	.9622	.0048	.0050	.0184	.0334
#3	.0000	-.0041	15.08	.0007	.9585	.0045	.0062	.0180	.0334

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2470.6**	**4903.6**	**38413.**	**3528.7**
Stddev	11.0	19.6	180.	35.8
%RSD	.44646	.40057	.46870	1.0143
#1	2462.0	4888.0	38208.	3491.7
#2	2483.1	4925.6	38543.	3531.4
#3	2466.8	4897.0	38490.	3563.1

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/13/2016 11:28:26 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2518**	**40.91**	**1.904**	**2.073**	**1.982**	**42.35**	**1.967**	**1.988**	**1.991**
Stddev	.0004	.09	.006	.008	.005	.07	.002	.004	.008
%RSD	.1632	.2121	.3125	.4012	.2557	.1664	.1015	.1922	.3838
#1	.2523	40.81	1.900	2.070	1.976	42.30	1.968	1.985	1.999
#2	.2516	40.98	1.901	2.066	1.986	42.32	1.965	1.987	1.985
#3	.2516	40.94	1.911	2.082	1.984	42.43	1.969	1.992	1.989
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.008**	**41.64**	**39.48**	**41.75**	**1.974**	**2.003**	**39.62**	**1.929**	**1.970**
Stddev	.009	.08	.17	.05	.010	.004	.17	.004	.007
%RSD	.4285	.1842	.4302	.1095	.5222	.2090	.4271	.2015	.3663
#1	2.012	41.56	39.28	41.72	1.986	2.000	39.44	1.928	1.977
#2	1.998	41.66	39.58	41.80	1.966	2.001	39.65	1.927	1.962
#3	2.014	41.71	39.58	41.72	1.971	2.008	39.78	1.934	1.971
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.901**	**1.946**	**1.676**	**2.065**	**1.972**	**1.967**	**1.968**	**1.959**	**1.918**
Stddev	.004	.005	.006	.002	.009	.009	.009	.005	.006
%RSD	.2365	.2609	.3405	.0921	.4798	.4335	.4838	.2347	.3361
#1	1.900	1.941	1.675	2.063	1.962	1.976	1.974	1.965	1.926
#2	1.896	1.944	1.672	2.065	1.974	1.960	1.957	1.956	1.914
#3	1.905	1.951	1.683	2.066	1.980	1.966	1.973	1.958	1.914
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/13/2016 11:28:26 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2302.4**	**4883.0**	**38693.**	**3545.6**
Stddev	6.5	13.8	138.	10.0
%RSD	.28429	.28281	.35661	.28104
#1	2304.9	4891.0	38665.	3547.9
#2	2307.3	4890.9	38843.	3534.6
#3	2294.9	4867.0	38571.	3554.2

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/13/2016 11:32:36 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**.0213**	**.0011**	**.0006**	**.0003**	**.0108**	**.0001**	**.0001**	**.0002**
Stddev	.0003	.0051	.0005	.0002	.0001	.0041	.0000	.0001	.0003
%RSD	397.0	23.76	47.27	33.16	16.27	37.72	39.66	100.6	151.8
#1	-.0004	.0213	.0012	.0006	.0003	.0113	.0001	.0003	.0004
#2	-.0001	.0163	.0016	.0008	.0004	.0065	.0001	.0000	.0004
#3	.0003	.0265	.0006	.0004	.0003	.0146	.0000	.0001	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**.0181**	**.0089**	**.0132**	**.0002**	**.0007**	**.0232**	**-.0001**	**.0002**
Stddev	.0001	.0051	.0267	.0258	.0000	.0003	.0124	.0002	.0000
%RSD	28.13	28.03	301.8	196.0	21.68	41.78	53.41	145.8	18.73
#1	.0005	.0229	.0348	.0429	.0002	.0011	.0308	.0001	.0002
#2	.0003	.0186	.0102	-.0007	.0003	.0008	.0300	-.0002	.0003
#3	.0003	.0128	-.0185	-.0028	.0002	.0004	.0089	-.0002	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0013**	**-.0005**	**.0015**	**.0004**	**.0003**	**.0004**	**.0008**	**.0002**	**.0004**
Stddev	.0007	.0005	.0002	.0002	.0002	.0000	.0012	.0001	.0000
%RSD	53.95	112.4	14.06	67.25	46.71	10.22	150.7	81.49	13.74
#1	.0016	-.0010	.0017	.0005	.0002	.0003	-.0004	.0002	.0004
#2	.0005	.0000	.0014	.0005	.0005	.0004	.0021	.0003	.0003
#3	.0017	-.0004	.0013	.0001	.0003	.0004	.0008	.0000	.0003
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/13/2016 11:32:36 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2676.5**	**5100.4**	**40719.**	**3646.9**
Stddev	3.7	8.5	106.	12.4
%RSD	.13751	.16707	.26013	.33999
#1	2679.0	5106.3	40838.	3634.4
#2	2672.2	5090.7	40634.	3647.1
#3	2678.1	5104.3	40686.	3659.2

Zoom In Zoom Out

Sample Name: MP30353-D1 Acquired: 5/13/2016 11:37:07 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0020**	**.0847**	**4.876**	**4.297**	**.0006**	**191.2**	**-.0025**	**.0017**	**.0009**
Stddev	.0006	.0351	.019	.034	.0001	1.5	.0002	.0003	.0011
%RSD	28.86	41.49	.3829	.7792	20.81	.7715	8.618	17.96	122.0
#1	-.0022	.0480	4.869	4.279	.0005	189.8	-.0025	.0014	.0013
#2	-.0013	.1180	4.897	4.277	.0007	191.0	-.0023	.0017	.0018
#3	-.0025	.0882	4.861	4.336	.0007	192.8	-.0027	.0020	-.0004

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0044**	**275.0**	**5.225**	**47.72**	**.0355**	**.0453**	**130.9**	**.0086**	**-.0132**
Stddev	.0007	2.7	.034	.55	.0002	.0008	.9	.0004	.0017
%RSD	16.91	.9900	.6561	1.159	.5604	1.823	.6975	4.699	12.84
#1	.0052	273.0	5.218	47.13	.0354	.0453	130.5	.0082	-.0115
#2	.0038	274.0	5.194	47.79	.0354	.0461	130.2	.0088	-.0148
#3	.0040	278.1	5.262	48.23	.0357	.0444	131.9	.0089	-.0134

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0039**	**-.0091**	**15.20**	**.0032**	**.9744**	**.0044**	**-.0049**	**.0185**	**.0335**
Stddev	.0054	.0052	.02	.0009	.0110	.0002	.0023	.0009	.0002
%RSD	137.8	57.80	.1326	28.73	1.132	4.454	47.29	5.017	.5274
#1	-.0003	-.0132	15.18	.0030	.9687	.0045	-.0022	.0175	.0333
#2	.0100	-.0032	15.22	.0042	.9673	.0042	-.0065	.0185	.0337
#3	.0020	-.0108	15.20	.0024	.9871	.0046	-.0059	.0194	.0335

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2498.6**	**4943.4**	**39278.**	**3544.5**
Stddev	2.2	4.8	245.	23.6
%RSD	.08842	.09682	.62266	.66686
#1	2498.3	4948.9	39523.	3565.3
#2	2496.6	4940.6	39278.	3549.5
#3	2501.0	4940.6	39033.	3518.8

Zoom In Zoom Out

Sample Name: MP30353-PS1 Acquired: 5/13/2016 11:45:49 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0506**	**2.882**	**4.815**	**4.463**	**.0547**	**190.3**	**.0518**	**.0571**	**.0561**
Stddev	.0021	.044	.001	.018	.0004	.8	.0006	.0003	.0009
%RSD	4.067	1.514	.0245	.4114	.8131	.4194	1.149	.5386	1.609
#1	.0492	2.929	4.816	4.455	.0552	190.5	.0511	.0568	.0560
#2	.0530	2.873	4.814	4.484	.0543	191.0	.0519	.0573	.0553
#3	.0497	2.843	4.816	4.450	.0547	189.4	.0523	.0573	.0571

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.1179**	**266.9**	**15.28**	**51.17**	**.0904**	**.1475**	**136.8**	**.1132**	**.0406**
Stddev	.0008	1.5	.09	.35	.0002	.0013	.7	.0008	.0022
%RSD	.7165	.5654	.5924	.6860	.2422	.8734	.5059	.6999	5.332
#1	.1169	267.1	15.36	51.38	.0906	.1489	136.9	.1134	.0416
#2	.1182	268.3	15.28	51.37	.0901	.1467	137.4	.1123	.0381
#3	.1185	265.3	15.18	50.77	.0904	.1467	136.1	.1138	.0421

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.1105**	**.1027**	**14.77**	**.0554**	**.9902**	**.1104**	**.1005**	**.0682**	**.2939**
Stddev	.0022	.0120	.04	.0004	.0046	.0009	.0030	.0006	.0012
%RSD	1.965	11.73	.2538	.6747	.4663	.8357	3.025	.9223	.4119
#1	.1123	.0902	14.82	.0556	.9895	.1114	.0970	.0687	.2938
#2	.1110	.1142	14.75	.0556	.9952	.1099	.1024	.0683	.2927
#3	.1081	.1037	14.75	.0549	.9860	.1098	.1021	.0675	.2951

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2477.4**	**4927.4**	**38796.**	**3577.2**
Stddev	2.0	7.7	34.	34.8
%RSD	.08001	.15576	.08732	.97243
#1	2479.2	4918.9	38831.	3574.3
#2	2475.3	4933.9	38792.	3544.0
#3	2477.7	4929.2	38764.	3613.4

Zoom In Zoom Out

Sample Name: MP30353-S1 Acquired: 5/13/2016 11:50:11 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0444**	**26.92**	**6.231**	**6.089**	**.0498**	**204.2**	**.0458**	**.4940**	**.1997**
Stddev	.0013	.24	.031	.049	.0011	1.6	.0003	.0011	.0014
%RSD	2.900	.8912	.4960	.8028	2.131	.7765	.7074	.2135	.6979
#1	.0457	27.14	6.247	6.145	.0506	206.0	.0456	.4948	.1998
#2	.0443	26.96	6.196	6.062	.0503	203.4	.0456	.4928	.2009
#3	.0431	26.66	6.252	6.059	.0486	203.1	.0462	.4943	.1982

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.2589**	**274.8**	**28.56**	**68.90**	**.5294**	**.5037**	**145.7**	**.4918**	**.4560**
Stddev	.0016	1.9	.08	.13	.0031	.0003	1.0	.0016	.0072
%RSD	.6318	.6755	.2837	.1955	.5779	.0633	.7040	.3325	1.574
#1	.2600	276.8	28.64	69.05	.5293	.5035	146.7	.4908	.4636
#2	.2570	274.4	28.48	68.81	.5264	.5036	145.5	.4909	.4551
#3	.2598	273.1	28.57	68.82	.5326	.5041	144.7	.4937	.4494

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.4769**	**1.905**	**13.97**	**.4951**	**1.365**	**.4712**	**1.869**	**.4710**	**.5263**
Stddev	.0043	.010	.04	.0009	.011	.0028	.007	.0008	.0022
%RSD	.9117	.5315	.2614	.1808	.8101	.5973	.3918	.1780	.4241
#1	.4772	1.906	13.97	.4941	1.376	.4700	1.862	.4701	.5279
#2	.4724	1.895	13.93	.4958	1.365	.4692	1.868	.4716	.5237
#3	.4810	1.915	14.01	.4954	1.354	.4744	1.877	.4714	.5273

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2428.7**	**4877.6**	**38449.**	**3531.1**
Stddev	1.4	9.8	21.	39.5
%RSD	.05917	.20001	.05550	1.1175
#1	2429.1	4871.0	38473.	3486.6
#2	2429.9	4888.8	38442.	3561.9
#3	2427.1	4872.9	38432.	3544.7

Zoom In Zoom Out

Sample Name: MP30353-S2 Acquired: 5/13/2016 11:54:27 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0436**	**26.80**	**6.215**	**6.116**	**.0497**	**206.1**	**.0456**	**.4921**	**.1993**
Stddev	.0013	.07	.015	.005	.0002	.7	.0004	.0006	.0016
%RSD	3.082	.2676	.2485	.0809	.3137	.3535	.9227	.1207	.8190
#1	.0421	26.88	6.205	6.122	.0495	206.9	.0460	.4915	.2007
#2	.0444	26.77	6.233	6.112	.0496	205.9	.0456	.4920	.1975
#3	.0445	26.75	6.206	6.116	.0498	205.4	.0451	.4927	.1995

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.2572**	**275.6**	**28.75**	**69.68**	**.5297**	**.5029**	**147.0**	**.4899**	**.4565**
Stddev	.0016	.6	.17	.22	.0006	.0003	.4	.0003	.0048
%RSD	.6088	.2193	.5791	.3115	.1048	.0583	.2656	.0608	1.062
#1	.2584	275.6	28.91	69.82	.5298	.5026	147.0	.4902	.4621
#2	.2578	276.2	28.75	69.79	.5302	.5028	147.4	.4898	.4543
#3	.2554	275.0	28.58	69.43	.5291	.5032	146.6	.4897	.4532

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.4686**	**1.904**	**14.16**	**.4956**	**1.371**	**.4718**	**1.862**	**.4694**	**.5188**
Stddev	.0029	.018	.01	.0043	.002	.0017	.004	.0024	.0006
%RSD	.6292	.9397	.0638	.8616	.1337	.3506	.2121	.5193	.1126
#1	.4673	1.885	14.16	.4971	1.370	.4719	1.859	.4709	.5194
#2	.4719	1.920	14.17	.4908	1.373	.4734	1.866	.4665	.5187
#3	.4664	1.906	14.16	.4990	1.371	.4701	1.859	.4706	.5183

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2443.0**	**4915.3**	**38837.**	**3545.0**
Stddev	3.5	2.3	62.	17.6
%RSD	.14147	.04767	.15941	.49728
#1	2443.7	4918.0	38836.	3526.3
#2	2439.3	4914.1	38776.	3547.3
#3	2446.1	4913.8	38900.	3561.3

Zoom In Zoom Out

Sample Name: FA33679-1 Acquired: 5/13/2016 11:58:43 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0005**	**.0268**	**.0478**	**.5074**	**.0000**	**105.9**	**-.0002**	**.0041**	**.0000**
Stddev	.0002	.0037	.0007	.0026	.000	.4	.0000	.0001	.000
%RSD	38.88	13.94	1.568	.5109	91.85	.3464	8.984	3.138	147.2
#1	-.0004	.0226	.0475	.5068	.0000	106.3	-.0003	.0040	.0000
#2	-.0008	.0296	.0472	.5052	-.0001	105.6	-.0002	.0040	-.0001
#3	-.0005	.0283	.0486	.5103	.0000	105.8	-.0002	.0042	.0000

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0000**	**4.343**	**.9543**	**36.38**	**.0862**	**.0075**	F **106.0**	**.0046**	**-.0012**
Stddev	.0001	.011	.0313	.18	.0005	.0001	.1	.0003	.0004
%RSD	303.1	.2457	3.283	.4936	.6238	1.377	.1278	6.255	36.23
#1	.0002	4.353	.9329	36.59	.0865	.0075	106.0	.0045	-.0012
#2	.0000	4.332	.9903	36.25	.0866	.0075	105.9	.0048	-.0017
#3	-.0001	4.343	.9398	36.31	.0856	.0073	106.2	.0043	-.0008

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0014**	**.0018**	**6.192**	**.0002**	**.3392**	**.0005**	**-.0012**	**-.0004**	**.0060**
Stddev	.0002	.0014	.018	.0002	.0007	.0001	.0016	.0002	.0002
%RSD	14.47	77.86	.2994	82.25	.2156	15.07	129.8	52.90	2.733
#1	.0016	.0030	6.199	.0004	.3392	.0006	.0006	-.0005	.0061
#2	.0012	.0003	6.207	.0002	.3385	.0005	-.0023	-.0001	.0060
#3	.0014	.0019	6.171	.0000	.3400	.0004	-.0020	-.0004	.0058

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2313.0**	**4734.4**	**37176.**	**3486.3**
Stddev	7.0	14.5	141.	32.1
%RSD	.30390	.30571	.37897	.92013
#1	2305.2	4721.0	37073.	3452.5
#2	2314.9	4732.4	37119.	3489.9
#3	2318.9	4749.8	37337.	3516.3

Zoom In Zoom Out

Sample Name: FA33679-2 Acquired: 5/13/2016 12:03:09 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0003**	**.1673**	**.0291**	**.4217**	**-.0001**	**108.6**	**-.0002**	**.0015**	**.0002**
Stddev	.0003	.0064	.0004	.0005	.0000	.1	.0000	.0001	.0000
%RSD	89.07	3.842	1.489	.1182	42.98	.1353	17.29	6.296	11.24
#1	-.0002	.1745	.0293	.4223	-.0001	108.6	-.0002	.0016	.0002
#2	-.0007	.1654	.0293	.4214	.0000	108.4	-.0002	.0014	.0002
#3	-.0002	.1621	.0286	.4215	-.0001	108.7	-.0001	.0015	.0003

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0004**	**4.003**	**.9679**	**35.96**	**.3234**	**.0125**	F **92.40**	**.0004**	**-.0005**
Stddev	.0001	.004	.0235	.07	.0016	.0000	.16	.0002	.0004
%RSD	25.20	.0887	2.431	.2042	.4903	.2417	.1711	61.05	75.73
#1	.0004	4.000	.9517	35.88	.3216	.0125	92.48	.0005	-.0009
#2	.0004	4.002	.9949	35.98	.3240	.0125	92.51	.0001	-.0002
#3	.0006	4.007	.9571	36.03	.3246	.0124	92.22	.0005	-.0003

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0004**	**.0023**	**5.933**	**.0005**	**.3059**	**.0044**	**-.0016**	**-.0001**	**.0010**
Stddev	.0003	.0012	.008	.0002	.0001	.0008	.0013	.0000	.0001
%RSD	75.44	51.46	.1391	38.95	.0304	18.15	78.04	15.43	6.185
#1	-.0007	.0020	5.932	.0003	.3058	.0036	-.0003	-.0001	.0009
#2	-.0002	.0036	5.925	.0005	.3060	.0044	-.0028	-.0001	.0010
#3	-.0002	.0013	5.942	.0007	.3058	.0052	-.0018	-.0001	.0010

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2316.4**	**4732.5**	**37173.**	**3465.2**
Stddev	4.9	8.9	123.	7.3
%RSD	.21265	.18774	.33076	.20957
#1	2311.7	4725.3	37286.	3473.6
#2	2316.0	4742.4	37191.	3460.7
#3	2321.5	4729.7	37042.	3461.3

Zoom In Zoom Out

Sample Name: FA33679-4 Acquired: 5/13/2016 12:07:35 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0003**	**.0273**	**.0001**	**.3136**	**.0000**	**87.06**	**-.0001**	**-.0002**	**.0000**
Stddev	.0001	.0033	.0002	.0028	.000	.38	.0000	.0001	.000
%RSD	39.33	12.04	270.2	.8885	594.5	.4370	20.09	55.96	988.7
#1	-.0003	.0238	.0000	.3168	.0000	87.46	-.0001	-.0003	.0002
#2	-.0004	.0303	.0003	.3122	.0000	86.70	-.0002	-.0001	-.0001
#3	-.0002	.0278	-.0001	.3118	.0000	87.04	-.0001	-.0001	-.0002

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0000**	**.0272**	**1.206**	**41.01**	**.0187**	**.0012**	**27.44**	**-.0002**	**-.0004**
Stddev	.000	.0013	.021	.16	.0000	.0000	.19	.0001	.0007
%RSD	765.2	4.748	1.711	.3910	.1555	3.378	.6785	28.90	184.2
#1	-.0001	.0284	1.227	41.10	.0188	.0012	27.65	-.0003	.0004
#2	-.0002	.0258	1.207	40.83	.0187	.0012	27.37	-.0003	-.0008
#3	.0002	.0275	1.186	41.11	.0187	.0013	27.30	-.0002	-.0007

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0002**	**.0036**	**5.012**	**.0004**	**2.291**	**.0008**	**-.0014**	**-.0004**	**.0006**
Stddev	.0010	.0007	.052	.0003	.015	.0001	.0003	.0001	.0001
%RSD	483.5	18.67	1.045	70.82	.6339	14.69	18.45	37.19	8.725
#1	.0000	.0030	4.953	.0001	2.307	.0008	-.0012	-.0004	.0006
#2	.0013	.0034	5.035	.0004	2.288	.0007	-.0017	-.0005	.0007
#3	-.0006	.0043	5.050	.0007	2.278	.0009	-.0014	-.0002	.0006

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2362.0**	**4761.1**	**38266.**	**3481.8**
Stddev	24.0	47.8	154.	6.9
%RSD	1.0156	1.0041	.40208	.19925
#1	2389.6	4816.1	38283.	3476.0
#2	2350.3	4738.0	38104.	3489.5
#3	2346.0	4729.3	38410.	3479.8

Zoom In Zoom Out

Sample Name: FA33679-5 Acquired: 5/13/2016 12:12:01 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0002**	**.0204**	**.0467**	**.4932**	**-.0001**	**102.9**	**-.0002**	**.0039**	**-.0001**
Stddev	.0002	.0037	.0004	.0014	.0000	.6	.0001	.0001	.0001
%RSD	111.1	18.14	.9079	.2841	80.13	.6119	29.76	2.833	270.7
#1	-.0004	.0208	.0462	.4927	.0000	102.9	-.0003	.0039	-.0002
#2	.0000	.0239	.0470	.4921	-.0001	102.2	-.0002	.0038	-.0001
#3	-.0002	.0165	.0469	.4948	-.0001	103.5	-.0001	.0040	.0001

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0000**	**4.208**	**.9503**	**35.25**	**.0840**	**.0072**	**F 103.1**	**.0045**	**-.0009**
Stddev	.0002	.009	.0354	.24	.0004	.0001	.4	.0001	.0009
%RSD	2849.	.2109	3.723	.6679	.4640	1.172	.4111	2.206	95.21
#1	-.0001	4.198	.9129	35.22	.0836	.0072	103.0	.0045	-.0019
#2	.0000	4.214	.9832	35.03	.0843	.0072	102.6	.0046	-.0005
#3	.0002	4.212	.9548	35.50	.0842	.0071	103.5	.0044	-.0003

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0002**	**.0024**	**6.047**	**.0001**	**.3302**	**.0004**	**-.0010**	**-.0002**	**.0058**
Stddev	.0008	.0017	.011	.0003	.0013	.0001	.0002	.0001	.0001
%RSD	383.1	71.95	.1761	357.6	.3997	26.96	21.97	35.85	1.142
#1	.0009	.0029	6.041	-.0002	.3296	.0003	-.0011	-.0002	.0058
#2	.0003	.0037	6.041	.0001	.3292	.0005	-.0011	-.0002	.0058
#3	-.0006	.0005	6.059	.0004	.3317	.0004	-.0007	-.0001	.0059

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2317.8**	**4746.2**	**37429.**	**3499.3**
Stddev	4.8	3.0	81.	35.8
%RSD	.20774	.06261	.21574	1.0221
#1	2320.0	4749.3	37453.	3502.0
#2	2312.3	4743.4	37339.	3533.7
#3	2321.1	4745.8	37496.	3462.3

Zoom In Zoom Out

Sample Name: FA33739-1 Acquired: 5/13/2016 12:16:27 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0004**	**.0232**	**-.0006**	**.0206**	**.0000**	**59.30**	**-.0001**	**-.0001**	**.0020**
Stddev	.0002	.0119	.0001	.0003	.000	.32	.0000	.0001	.0001
%RSD	48.05	51.27	18.42	1.602	112.7	.5331	3.389	72.91	7.416
#1	-.0003	.0187	-.0007	.0210	-.0001	59.52	-.0001	.0000	.0019
#2	-.0007	.0366	-.0006	.0205	.0000	58.94	-.0001	-.0001	.0019
#3	-.0004	.0142	-.0005	.0204	.0000	59.44	-.0001	-.0002	.0021

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0000**	**.5305**	**.8713**	**2.814**	**.0159**	**.0040**	**4.029**	**-.0002**	**-.0008**
Stddev	.000	.0041	.0287	.040	.0000	.0000	.029	.0000	.0004
%RSD	2881.	.7772	3.297	1.404	.2874	1.221	.7068	23.27	50.69
#1	.0003	.5294	.9002	2.813	.0158	.0040	4.025	-.0002	-.0003
#2	-.0001	.5271	.8427	2.775	.0159	.0041	4.002	-.0002	-.0009
#3	-.0002	.5351	.8709	2.854	.0159	.0040	4.059	-.0002	-.0011

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0000**	**.0025**	**1.848**	**.0002**	**.2111**	**.0004**	**-.0007**	**-.0001**	**.0080**
Stddev	.0001	.0015	.003	.0002	.0011	.0000	.0008	.0001	.0000
%RSD	2056.	61.18	.1645	97.90	.5416	5.483	115.1	79.56	.5105
#1	.0001	.0015	1.845	.0003	.2110	.0005	.0000	-.0001	.0080
#2	.0000	.0018	1.851	.0000	.2100	.0004	-.0004	-.0002	.0080
#3	.0000	.0043	1.848	.0004	.2123	.0004	-.0015	.0000	.0080

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2530.1**	**4967.3**	**39477.**	**3566.5**
Stddev	6.3	5.8	68.	33.3
%RSD	.24758	.11673	.17114	.93351
#1	2537.3	4967.9	39544.	3531.1
#2	2526.8	4972.8	39479.	3597.3
#3	2526.1	4961.2	39409.	3571.0

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/13/2016 12:20:54 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2538**	**41.02**	**1.892**	**2.080**	**1.971**	**42.51**	**1.957**	**1.982**	**1.985**
Stddev	.0007	.01	.004	.002	.003	.05	.002	.002	.008
%RSD	.2821	.0281	.2263	.1097	.1545	.1250	.1230	.1078	.4122
#1	.2531	41.03	1.896	2.081	1.974	42.54	1.959	1.984	1.988
#2	.2545	41.01	1.892	2.082	1.968	42.45	1.957	1.983	1.991
#3	.2539	41.01	1.888	2.078	1.971	42.53	1.954	1.980	1.975
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.013**	**41.47**	**39.35**	**41.92**	**1.961**	**1.998**	**39.59**	**1.922**	**1.961**
Stddev	.009	.02	.06	.17	.010	.001	.04	.003	.002
%RSD	.4343	.0536	.1429	.4101	.5099	.0344	.0972	.1442	.1094
#1	2.022	41.45	39.38	42.08	1.966	1.998	39.63	1.923	1.963
#2	2.013	41.49	39.39	41.74	1.969	1.998	39.59	1.924	1.959
#3	2.004	41.48	39.29	41.94	1.950	1.997	39.55	1.919	1.960
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.899**	**1.938**	**1.671**	**2.062**	**1.961**	**1.957**	**1.960**	**1.953**	**1.903**
Stddev	.002	.006	.002	.002	.003	.007	.005	.004	.003
%RSD	.0809	.3280	.1337	.1160	.1500	.3578	.2507	.2221	.1430
#1	1.898	1.936	1.674	2.063	1.962	1.961	1.957	1.953	1.905
#2	1.900	1.946	1.669	2.063	1.964	1.962	1.957	1.956	1.905
#3	1.898	1.934	1.671	2.059	1.958	1.949	1.966	1.948	1.900
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/13/2016 12:20:54 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2306.5**	**4894.9**	**38798.**	**3540.8**
Stddev	6.1	8.3	214.	9.3
%RSD	.26402	.16861	.55050	.26393
#1	2301.5	4885.3	38725.	3531.4
#2	2313.3	4899.8	38631.	3550.0
#3	2304.7	4899.5	39039.	3541.1

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/13/2016 12:25:05 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**.0183**	**.0004**	**.0003**	**.0003**	**.0089**	**.0001**	**.0001**	**.0003**
Stddev	.0002	.0040	.0002	.0001	.0001	.0032	.0000	.0001	.0001
%RSD	296.5	21.97	65.02	22.08	36.92	35.64	72.31	70.60	44.16
#1	-.0002	.0190	.0006	.0004	.0004	.0096	.0001	.0001	.0004
#2	-.0002	.0219	.0001	.0003	.0003	.0054	.0001	.0000	.0001
#3	.0002	.0140	.0003	.0002	.0002	.0117	.0000	.0002	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0140**	**-.0343**	**-.0134**	**.0001**	**.0009**	**.0535**	**.0000**	**-.0001**
Stddev	.0001	.0008	.0068	.0217	.0000	.0002	.0026	.000	.0008
%RSD	99.44	5.923	19.93	161.9	10.21	24.88	4.774	401.6	1130.
#1	.0003	.0136	-.0407	-.0326	.0001	.0011	.0563	.0001	.0008
#2	.0001	.0135	-.0351	.0101	.0001	.0009	.0528	.0000	-.0003
#3	.0000	.0150	-.0271	-.0176	.0001	.0006	.0513	-.0001	-.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0020**	F **.0023**	**.0020**	**.0003**	**.0003**	**.0004**	**.0000**	**.0000**	**.0003**
Stddev	.0008	.0014	.0001	.0002	.0000	.0001	.001	.000	.0000
%RSD	39.31	61.33	6.570	52.14	9.774	28.52	1638.	407.0	6.349
#1	.0028	.0030	.0019	.0005	.0003	.0005	-.0008	-.0003	.0003
#2	.0012	.0033	.0021	.0001	.0003	.0004	.0000	.0000	.0003
#3	.0019	.0007	.0018	.0003	.0002	.0003	.0006	.0001	.0003
Check ?	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.0020							
Low Limit		-.0020							

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/13/2016 12:25:05 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2681.3**	**5108.6**	**40568.**	**3651.7**
Stddev	6.2	15.6	63.	34.1
%RSD	.23142	.30519	.15560	.93280
#1	2687.4	5121.1	40560.	3623.7
#2	2675.0	5091.2	40509.	3689.7
#3	2681.5	5113.6	40635.	3641.9

Zoom In Zoom Out

Sample Name: FA33739-2 Acquired: 5/13/2016 12:29:36 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0002**	**.0855**	**.0017**	**.0303**	**-.0001**	**87.59**	**-.0001**	**-.0001**	**.0086**
Stddev	.0003	.0059	.0006	.0001	.0000	.17	.0000	.0000	.0001
%RSD	133.2	6.904	33.81	.2942	32.60	.1922	27.55	15.12	1.687
#1	-.0003	.0793	.0019	.0302	-.0001	87.46	-.0002	-.0001	.0088
#2	.0001	.0861	.0010	.0304	-.0001	87.78	-.0001	-.0001	.0085
#3	-.0005	.0911	.0021	.0303	-.0001	87.53	-.0001	-.0002	.0086

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0001**	**.0300**	**13.49**	**240.9**	**.1010**	**.0013**	F **202.3**	**-.0005**	**-.0015**
Stddev	.0002	.0039	.06	.7	.0002	.0001	2.3	.0001	.0002
%RSD	274.1	12.84	.4511	.3012	.1571	8.641	1.142	22.78	10.56
#1	-.0001	.0339	13.43	240.1	.1010	.0013	204.4	-.0005	-.0016
#2	.0002	.0300	13.54	240.9	.1012	.0015	199.8	-.0005	-.0013
#3	.0001	.0261	13.51	241.5	.1009	.0013	202.6	-.0007	-.0016

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0014**	**.0037**	**22.64**	**.0012**	**.4360**	**.0052**	**-.0012**	**.0030**	**.0618**
Stddev	.0007	.0008	.03	.0004	.0029	.0008	.0010	.0002	.0001
%RSD	45.21	22.83	.1501	34.97	.6675	15.44	82.85	6.514	.2054
#1	.0021	.0045	22.66	.0011	.4339	.0048	-.0024	.0028	.0618
#2	.0008	.0038	22.66	.0008	.4393	.0047	-.0004	.0029	.0620
#3	.0014	.0028	22.60	.0016	.4348	.0061	-.0009	.0032	.0617

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2159.7**	**4550.7**	**35801.**	**3418.1**
Stddev	3.6	7.3	65.	12.1
%RSD	.16780	.15944	.18020	.35443
#1	2158.5	4543.9	35798.	3425.2
#2	2156.8	4549.9	35738.	3425.0
#3	2163.7	4558.3	35867.	3404.1

Zoom In Zoom Out

Sample Name: FA33739-5 Acquired: 5/13/2016 12:34:10 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0005**	**.0192**	**.0018**	**.0129**	**.0000**	**40.30**	**-.0002**	**-.0001**	**.0005**
Stddev	.0002	.0030	.0007	.0004	.000	.09	.0000	.0001	.0001
%RSD	53.12	15.41	40.81	2.764	342.9	.2171	23.13	60.24	10.99
#1	-.0005	.0218	.0013	.0125	.0001	40.29	-.0002	.0000	.0005
#2	-.0006	.0198	.0014	.0129	-.0001	40.39	-.0002	-.0002	.0006
#3	-.0002	.0160	.0027	.0132	.0000	40.21	-.0001	-.0001	.0006

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0003**	**2.258**	**6.169**	**6.457**	**.0469**	**-.0002**	**F 131.5**	**-.0003**	**.0000**
Stddev	.0002	.007	.033	.014	.0000	.0002	.3	.0001	.0002
%RSD	68.35	.3127	.5410	.2088	.0693	97.89	.2440	20.47	5589.
#1	.0005	2.250	6.178	6.447	.0468	-.0002	131.5	-.0002	-.0001
#2	.0004	2.265	6.197	6.472	.0469	.0000	131.8	-.0003	.0003
#3	.0001	2.259	6.132	6.451	.0469	-.0003	131.2	-.0003	-.0001

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0002**	**.0019**	**4.269**	**.0004**	**.1917**	**.0005**	**-.0013**	**-.0001**	**.0123**
Stddev	.0010	.0022	.005	.0004	.0007	.0000	.0005	.0001	.0001
%RSD	529.2	116.9	.1262	102.4	.3497	7.746	38.15	170.8	.4744
#1	-.0002	.0008	4.263	.0005	.1912	.0006	-.0009	-.0002	.0122
#2	.0014	.0004	4.269	.0000	.1925	.0005	-.0012	-.0001	.0123
#3	-.0006	.0045	4.274	.0008	.1915	.0005	-.0018	.0001	.0122

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2368.9**	**4839.9**	**37782.**	**3505.7**
Stddev	.5	2.8	201.	33.2
%RSD	.01949	.05830	.53298	.94671
#1	2368.5	4838.4	37580.	3487.5
#2	2368.9	4843.1	37983.	3485.5
#3	2369.4	4838.1	37781.	3544.0

Zoom In Zoom Out

Sample Name: FA33739-6 Acquired: 5/13/2016 12:38:38 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0004**	**.2470**	**-.0001**	**.0134**	**.0000**	**21.27**	**-.0001**	**-.0001**	**.0089**
Stddev	.0003	.0160	.0008	.0004	.000	.06	.0000	.0001	.0003
%RSD	65.00	6.495	578.0	2.907	83.24	.2643	35.58	95.84	3.218
#1	-.0005	.2476	-.0007	.0139	.0000	21.33	-.0001	.0000	.0093
#2	-.0001	.2307	-.0005	.0133	-.0001	21.22	-.0001	-.0002	.0088
#3	-.0005	.2628	.0007	.0131	.0000	21.26	-.0002	-.0001	.0088

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0010**	**.0450**	**17.01**	**41.78**	**.0176**	**-.0002**	**F 337.2**	**.0002**	**-.0002**
Stddev	.0002	.0013	.05	.25	.0002	.0000	1.7	.0001	.0007
%RSD	21.72	2.867	.2756	.5988	1.406	13.44	.4937	74.75	270.2
#1	.0012	.0464	17.04	41.66	.0174	-.0003	339.0	.0001	-.0010
#2	.0008	.0441	17.03	41.62	.0179	-.0002	336.6	.0001	.0002
#3	.0010	.0444	16.95	42.07	.0176	-.0003	335.8	.0003	.0001

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0014**	**.0023**	**1.638**	**.0007**	**.1952**	**.0047**	**-.0022**	**.0015**	**.0022**
Stddev	.0002	.0004	.001	.0003	.0005	.0001	.0004	.0002	.0001
%RSD	11.38	17.83	.0598	41.69	.2534	1.603	18.12	11.92	2.684
#1	.0015	.0027	1.636	.0004	.1954	.0047	-.0025	.0014	.0022
#2	.0012	.0019	1.638	.0006	.1956	.0047	-.0018	.0017	.0022
#3	.0015	.0022	1.638	.0010	.1946	.0048	-.0024	.0013	.0023

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2234.5**	**4693.2**	**36244.**	**3499.1**
Stddev	6.3	8.1	208.	12.6
%RSD	.28123	.17251	.57503	.36114
#1	2227.7	4684.2	36420.	3509.0
#2	2240.0	4699.9	36014.	3503.5
#3	2235.9	4695.6	36299.	3484.9

Zoom In Zoom Out

Sample Name: FA33739-7 Acquired: 5/13/2016 12:43:14 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0002**	**.0276**	**.0003**	**.0069**	**-.0001**	**31.94**	**-.0001**	**-.0002**	**.0028**
Stddev	.0003	.0061	.0003	.0003	.0000	.15	.0000	.0000	.0002
%RSD	142.0	21.99	97.15	3.889	15.23	.4652	9.988	15.34	5.980
#1	-.0005	.0238	.0001	.0068	-.0001	31.92	-.0001	-.0001	.0028
#2	-.0001	.0244	.0002	.0067	-.0001	31.80	-.0002	-.0002	.0029
#3	.0000	.0346	.0007	.0072	-.0001	32.09	-.0001	-.0001	.0026

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**-.0002**	**.0375**	**1.747**	**11.57**	**.0069**	**-.0006**	**4.307**	**-.0001**	**-.0003**
Stddev	.0002	.0026	.029	.09	.0001	.0001	.003	.0002	.0000
%RSD	106.5	6.909	1.659	.7973	.7857	21.79	.0618	328.6	10.55
#1	-.0003	.0348	1.746	11.53	.0069	-.0005	4.307	.0001	-.0003
#2	.0000	.0399	1.776	11.51	.0069	-.0007	4.310	-.0001	-.0003
#3	-.0002	.0379	1.719	11.68	.0068	-.0005	4.304	-.0003	-.0002

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0001**	**.0015**	**1.678**	**.0000**	**.1274**	**.0005**	**-.0021**	**.0004**	**.0174**
Stddev	.0005	.0007	.003	.0001	.0009	.0001	.0004	.0001	.0000
%RSD	629.0	47.53	.1486	333.2	.7325	10.32	21.68	23.17	.2681
#1	.0006	.0011	1.677	.0000	.1263	.0004	-.0022	.0005	.0174
#2	-.0002	.0012	1.680	.0002	.1275	.0005	-.0016	.0004	.0174
#3	-.0002	.0024	1.676	-.0001	.1282	.0005	-.0024	.0003	.0173

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2543.3**	**4981.7**	**39636.**	**3553.9**
Stddev	3.6	4.9	114.	26.6
%RSD	.14085	.09826	.28680	.74718
#1	2539.2	4982.9	39531.	3571.4
#2	2545.3	4976.3	39620.	3566.9
#3	2545.5	4985.9	39756.	3523.4

Zoom In Zoom Out

Sample Name: FA33739-8 Acquired: 5/13/2016 12:47:42 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0004**	**.0306**	**.0028**	**.0461**	**.0000**	**132.4**	**-.0002**	**-.0002**	**.0039**
Stddev	.0005	.0047	.0018	.0003	.000	.3	.0000	.0001	.0002
%RSD	115.9	15.27	64.87	.5993	173.2	.2163	7.955	32.83	5.387
#1	.0001	.0299	.0016	.0458	-.0001	132.5	-.0002	-.0002	.0039
#2	-.0006	.0263	.0050	.0463	.0000	132.1	-.0002	-.0001	.0038
#3	-.0007	.0356	.0020	.0463	.0000	132.6	-.0003	-.0003	.0042

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**-.0002**	**28.27**	**F 88.91**	**324.6**	**.1091**	**.0076**	**F 1700.**	**-.0008**	**-.0015**
Stddev	.0002	.10	.17	.8	.0013	.0001	19.	.0003	.0015
%RSD	116.1	.3470	.1866	.2337	1.230	1.245	1.138	41.36	97.18
#1	-.0001	28.20	88.93	324.6	.1076	.0075	1722.	-.0009	-.0016
#2	.0000	28.23	88.73	323.8	.1103	.0076	1687.	-.0004	-.0029
#3	-.0005	28.38	89.06	325.3	.1095	.0076	1690.	-.0010	.0000

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0009**	**.0018**	**3.066**	**.0004**	**1.803**	**.0010**	**-.0023**	**.0032**	**.1059**
Stddev	.0009	.0011	.010	.0004	.004	.0001	.0003	.0001	.0005
%RSD	96.35	61.47	.3364	96.17	.2285	13.99	13.78	4.130	.4683
#1	.0009	.0006	3.062	.0006	1.803	.0009	-.0022	.0031	.1057
#2	.0001	.0028	3.078	.0008	1.799	.0009	-.0026	.0033	.1065
#3	.0018	.0019	3.058	.0000	1.808	.0011	-.0020	.0033	.1055

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1824.9**	**4038.3**	**30491.**	**3309.4**
Stddev	5.7	9.3	310.	4.0
%RSD	.31368	.23120	1.0172	.12128
#1	1825.9	4044.3	30825.	3309.2
#2	1818.7	4027.5	30211.	3305.4
#3	1830.1	4043.1	30438.	3313.4

Zoom In Zoom Out

Sample Name: FA33739-9 Acquired: 5/13/2016 12:52:16 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0002**	**.0317**	**-.0002**	**.0412**	**-.0001**	**97.97**	**-.0001**	**-.0005**	**.0007**
Stddev	.0001	.0034	.0009	.0002	.0000	.37	.0000	.0001	.0001
%RSD	47.91	10.64	371.3	.5291	36.43	.3776	24.85	26.35	18.51
#1	-.0001	.0353	.0007	.0412	-.0001	98.23	-.0002	-.0006	.0009
#2	-.0003	.0287	-.0008	.0414	.0000	98.13	-.0001	-.0004	.0008
#3	-.0003	.0311	-.0006	.0409	-.0001	97.55	-.0002	-.0004	.0006

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0004**	**.0534**	**6.406**	**20.87**	**.1467**	**-.0003**	**43.17**	**-.0006**	**-.0009**
Stddev	.0002	.0085	.017	.08	.0009	.0000	.07	.0001	.0004
%RSD	44.70	15.83	.2674	.3654	.6061	10.32	.1560	24.22	43.98
#1	.0005	.0619	6.392	20.91	.1466	-.0003	43.15	-.0006	-.0007
#2	.0003	.0534	6.401	20.92	.1477	-.0003	43.24	-.0004	-.0007
#3	.0002	.0450	6.425	20.78	.1459	-.0003	43.11	-.0007	-.0014

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0003**	**.0031**	**17.52**	**.0003**	**.4070**	**.0011**	**-.0014**	**.0001**	**.0010**
Stddev	.0006	.0003	.04	.0002	.0006	.0001	.0014	.0001	.0001
%RSD	236.4	11.10	.2176	69.15	.1469	5.063	104.0	83.70	9.486
#1	-.0003	.0034	17.48	.0005	.4063	.0011	-.0023	.0002	.0011
#2	.0002	.0032	17.55	.0002	.4074	.0011	-.0022	.0000	.0010
#3	.0009	.0027	17.54	.0002	.4072	.0012	.0003	.0002	.0009

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2392.9**	**4848.0**	**38514.**	**3531.0**
Stddev	1.1	12.3	102.	25.4
%RSD	.04465	.25278	.26369	.71887
#1	2393.9	4860.2	38529.	3514.1
#2	2391.8	4835.7	38406.	3518.7
#3	2393.0	4848.0	38608.	3560.2

Zoom In Zoom Out

Sample Name: FA33739-10 Acquired: 5/13/2016 12:56:42 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0004**	**.0360**	**-.0008**	**.0431**	**-.0001**	**97.60**	**-.0001**	**-.0004**	**.0011**
Stddev	.0004	.0084	.0007	.0002	.0000	.46	.0000	.0001	.0001
%RSD	104.4	23.34	80.72	.5077	27.91	.4729	29.29	21.78	12.35
#1	-.0008	.0276	-.0003	.0433	-.0001	97.50	-.0001	-.0003	.0012
#2	-.0002	.0444	-.0016	.0429	-.0001	98.10	-.0001	-.0005	.0009
#3	-.0001	.0359	-.0006	.0431	-.0001	97.20	-.0002	-.0004	.0012

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0002**	**.0502**	**6.715**	**21.71**	**.1449**	**-.0004**	**45.61**	**-.0009**	**-.0009**
Stddev	.0001	.0011	.039	.11	.0006	.0001	.19	.0001	.0002
%RSD	77.66	2.106	.5821	.5181	.3809	19.16	.4171	13.50	21.46
#1	.0001	.0489	6.732	21.71	.1454	-.0004	45.59	-.0008	-.0007
#2	.0003	.0507	6.742	21.83	.1449	-.0005	45.81	-.0009	-.0010
#3	.0001	.0508	6.670	21.60	.1443	-.0003	45.44	-.0011	-.0010

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0000**	**.0018**	**17.27**	**.0004**	**.4125**	**.0012**	**-.0018**	**.0002**	**.0024**
Stddev	.0010	.0016	.04	.0003	.0012	.0001	.0007	.0003	.0000
%RSD	9161.	92.57	.2153	97.28	.2954	4.940	39.94	159.4	1.313
#1	.0012	.0036	17.30	.0000	.4114	.0012	-.0010	.0005	.0025
#2	-.0004	.0006	17.23	.0007	.4138	.0011	-.0020	.0002	.0024
#3	-.0008	.0010	17.29	.0004	.4122	.0012	-.0024	-.0001	.0024

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2361.8**	**4780.8**	**37833.**	**3459.4**
Stddev	1.9	11.7	125.	34.5
%RSD	.08196	.24518	.33093	.99750
#1	2364.0	4785.6	37719.	3480.5
#2	2361.1	4789.3	37812.	3419.6
#3	2360.4	4767.4	37967.	3478.1

Zoom In Zoom Out

Sample Name: FA33895-3 Acquired: 5/13/2016 13:01:11 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0000**	**1.598**	**.0008**	**.0683**	**.0001**	**159.7**	**.0000**	**.0001**	**.0035**
Stddev	.000	.008	.0005	.0001	.0000	1.2	.000	.0001	.0002
%RSD	787.2	.4810	62.65	.2094	42.77	.7623	232.1	91.60	6.172
#1	-.0001	1.605	.0002	.0683	.0001	160.1	-.0001	.0002	.0036
#2	-.0003	1.598	.0011	.0682	.0000	160.6	.0000	.0000	.0033
#3	.0003	1.590	.0011	.0685	.0001	158.3	.0000	.0001	.0037

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0260**	**2.739**	**12.57**	**87.67**	**.0870**	**-.0002**	**F 361.6**	**.0010**	**.0046**
Stddev	.0001	.014	.05	.83	.0005	.0001	7.5	.0001	.0012
%RSD	.2230	.5185	.3877	.9483	.5380	40.86	2.073	11.89	26.00
#1	.0260	2.751	12.53	87.94	.0875	-.0001	362.1	.0011	.0050
#2	.0260	2.742	12.55	88.33	.0866	-.0001	368.8	.0009	.0033
#3	.0259	2.724	12.62	86.74	.0870	-.0002	353.9	.0011	.0056

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0001**	**.0029**	**4.894**	**.0010**	**F 13.88**	**.0058**	**-.0025**	**.0023**	**.1131**
Stddev	.0006	.0023	.009	.0002	.19	.0005	.0003	.0001	.0003
%RSD	475.1	79.42	.1910	15.18	1.343	8.260	13.35	4.183	.2693
#1	-.0004	.0055	4.893	.0008	13.73	.0055	-.0022	.0024	.1133
#2	.0008	.0013	4.884	.0010	14.09	.0063	-.0029	.0024	.1127
#3	.0000	.0018	4.903	.0011	13.81	.0056	-.0024	.0022	.1133

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2138.5**	**4534.9**	**35470.**	**3424.3**
Stddev	2.4	7.7	162.	45.3
%RSD	.11143	.17055	.45533	1.3222
#1	2138.4	4528.2	35343.	3443.8
#2	2136.1	4543.4	35652.	3372.6
#3	2140.9	4533.1	35415.	3456.6

Zoom In Zoom Out

Sample Name: FA33860-1 Acquired: 5/13/2016 13:05:53 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0001**	**.0608**	**-.0004**	**.0014**	**-.0001**	**9.531**	**.0010**	**.0003**	**.0009**
Stddev	.0003	.0131	.0003	.0001	.0001	.024	.0000	.0001	.0001
%RSD	479.7	21.50	84.44	8.830	56.46	.2529	2.493	21.20	12.74
#1	-.0003	.0470	.0000	.0013	-.0001	9.558	.0010	.0003	.0010
#2	.0002	.0625	-.0007	.0015	-.0001	9.512	.0009	.0003	.0008
#3	-.0001	.0730	-.0005	.0013	.0000	9.524	.0010	.0002	.0008

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0011**	**.0026**	**1.172**	**.8449**	**.0048**	**.0022**	**32.65**	**.0015**	**-.0003**
Stddev	.0001	.0023	.014	.0375	.0001	.0001	.07	.0001	.0004
%RSD	10.47	88.66	1.181	4.436	1.356	5.699	.2234	7.691	145.0
#1	.0010	.0052	1.171	.8814	.0047	.0023	32.60	.0015	-.0006
#2	.0012	.0007	1.186	.8065	.0048	.0023	32.73	.0016	-.0003
#3	.0011	.0020	1.159	.8470	.0048	.0021	32.62	.0013	.0001

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0009**	**.0011**	**1.531**	**.0002**	**.0055**	**.0000**	**-.0019**	**.0524**	**.0096**
Stddev	.0005	.0006	.004	.0004	.0003	.000	.0010	.0003	.0001
%RSD	52.66	51.62	.2508	239.9	5.058	236.1	54.16	.4910	1.056
#1	.0007	.0016	1.526	.0006	.0052	-.0001	-.0029	.0526	.0095
#2	.0007	.0012	1.533	.0000	.0057	.0000	-.0018	.0521	.0097
#3	.0015	.0005	1.532	-.0001	.0056	.0001	-.0009	.0524	.0095

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2540.0**	**4990.9**	**39511.**	**3530.8**
Stddev	1.5	.9	118.	20.9
%RSD	.05821	.01769	.29862	.59115
#1	2540.1	4990.1	39482.	3521.6
#2	2541.4	4990.7	39411.	3554.7
#3	2538.4	4991.8	39641.	3516.1

Zoom In Zoom Out

Sample Name: FA33860-2 Acquired: 5/13/2016 13:10:20 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0003**	**7.866**	**.0005**	**.0157**	**.0000**	**112.6**	**-.0001**	**.0001**	**.0261**
Stddev	.0002	.005	.0008	.0001	.000	.4	.0000	.0000	.0002
%RSD	59.63	.0673	143.8	.5131	785.5	.3239	31.98	21.79	.5934
#1	.0002	7.870	.0006	.0157	.0000	112.8	.0000	.0001	.0262
#2	.0001	7.860	-.0003	.0158	-.0001	112.8	-.0001	.0000	.0260
#3	.0004	7.867	.0012	.0157	.0000	112.2	-.0001	.0001	.0259

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0105**	**.3276**	**2.239**	**2.237**	**.0080**	**-.0001**	F **336.6**	**.0016**	**.0003**
Stddev	.0004	.0016	.014	.009	.0001	.0003	4.8	.0001	.0007
%RSD	3.556	.4916	.6346	.4165	.7750	475.1	1.415	6.129	202.9
#1	.0104	.3294	2.255	2.227	.0080	.0002	339.6	.0017	.0007
#2	.0103	.3273	2.232	2.245	.0079	-.0003	339.1	.0016	-.0004
#3	.0110	.3262	2.230	2.238	.0080	-.0001	331.1	.0015	.0007

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0001**	**.0049**	**3.077**	**.0008**	**.0705**	**.0131**	**-.0026**	**.0651**	**.0086**
Stddev	.0006	.0018	.005	.0002	.0003	.0001	.0018	.0002	.0001
%RSD	949.5	35.90	.1744	23.26	.3756	.3984	68.62	.2935	1.235
#1	-.0008	.0046	3.071	.0006	.0708	.0131	-.0033	.0651	.0086
#2	.0003	.0068	3.079	.0010	.0706	.0132	-.0005	.0649	.0088
#3	.0002	.0033	3.081	.0007	.0702	.0132	-.0038	.0653	.0085

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2208.0**	**4710.9**	**36957.**	**3515.6**
Stddev	2.2	7.6	139.	14.0
%RSD	.10075	.16204	.37475	.39686
#1	2208.5	4717.9	36891.	3527.3
#2	2205.6	4702.8	37116.	3500.1
#3	2210.0	4712.0	36864.	3519.3

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/13/2016 13:14:57 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2543**	**41.51**	**1.903**	**2.093**	**2.006**	**42.80**	**1.968**	**1.992**	**1.998**
Stddev	.0005	.17	.005	.005	.010	.24	.002	.001	.005
%RSD	.2042	.4069	.2749	.2372	.4947	.5713	.1163	.0363	.2365
#1	.2541	41.42	1.907	2.093	2.000	42.79	1.970	1.992	2.001
#2	.2538	41.70	1.897	2.098	2.017	43.04	1.965	1.991	1.992
#3	.2548	41.41	1.903	2.088	2.001	42.55	1.969	1.992	2.000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.029**	**42.09**	**40.03**	**42.30**	**1.979**	**2.007**	**40.07**	**1.932**	**1.966**
Stddev	.005	.21	.17	.34	.005	.001	.18	.002	.002
%RSD	.2302	.4919	.4233	.7928	.2376	.0255	.4391	.1082	.1096
#1	2.028	42.04	39.99	42.25	1.980	2.007	39.99	1.934	1.968
#2	2.026	42.32	40.21	42.66	1.975	2.008	40.27	1.930	1.963
#3	2.035	41.92	39.88	41.99	1.984	2.007	39.95	1.931	1.966
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.905**	**1.950**	**1.680**	**2.075**	**1.994**	**1.977**	**1.962**	**1.964**	**1.922**
Stddev	.006	.001	.003	.002	.007	.004	.007	.002	.003
%RSD	.3180	.0326	.1677	.1014	.3521	.2253	.3790	.1052	.1620
#1	1.911	1.949	1.683	2.077	1.991	1.977	1.966	1.965	1.925
#2	1.904	1.950	1.680	2.077	2.002	1.972	1.965	1.962	1.919
#3	1.899	1.950	1.677	2.073	1.988	1.981	1.953	1.965	1.922
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/13/2016 13:14:57 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2291.5**	**4855.6**	**38488.**	**3478.1**
Stddev	4.5	6.0	175.	31.7
%RSD	.19685	.12269	.45512	.91019
#1	2296.7	4862.4	38521.	3478.8
#2	2289.4	4851.9	38644.	3446.1
#3	2288.5	4852.4	38298.	3509.5

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/13/2016 13:19:08 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**.0150**	**.0008**	**.0003**	**.0002**	**.0119**	**.0000**	**.0001**	**.0000**
Stddev	.0003	.0060	.0001	.0003	.0001	.0025	.0000	.0000	.000
%RSD	194.9	39.98	16.24	81.41	62.40	20.74	30.90	29.33	1061.
#1	.0002	.0118	.0007	.0006	.0003	.0147	.0000	.0001	-.0001
#2	-.0003	.0112	.0008	.0002	.0001	.0105	.0000	.0001	-.0001
#3	-.0003	.0219	.0009	.0002	.0001	.0104	.0000	.0001	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0143**	**.0350**	**-.0124**	**.0001**	**.0008**	**.1434**	**-.0002**	**.0001**
Stddev	.0001	.0037	.0183	.0228	.0000	.0003	.0049	.0001	.0000
%RSD	116.3	25.69	52.16	183.9	15.31	37.31	3.391	25.72	42.74
#1	.0001	.0185	.0554	-.0210	.0001	.0011	.1489	-.0002	.0001
#2	.0000	.0116	.0202	.0134	.0001	.0006	.1411	-.0002	.0001
#3	.0001	.0129	.0295	-.0296	.0001	.0005	.1400	-.0003	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0008**	**.0019**	**.0025**	**.0002**	**.0002**	**.0004**	**.0002**	**-.0002**	**.0003**
Stddev	.0009	.0024	.0002	.0001	.0001	.0001	.0008	.0000	.0001
%RSD	112.2	130.4	9.171	42.59	36.65	23.17	484.6	28.83	25.32
#1	.0018	.0034	.0028	.0003	.0002	.0005	-.0005	-.0001	.0004
#2	.0003	.0032	.0024	.0001	.0001	.0004	-.0001	-.0002	.0002
#3	.0002	-.0009	.0025	.0003	.0002	.0003	.0011	-.0002	.0003
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/13/2016 13:19:08 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2700.0**	**5151.1**	**40928.**	**3611.0**
Stddev	14.3	14.4	168.	34.7
%RSD	.53063	.27954	.40942	.96112
#1	2688.3	5150.7	40798.	3625.4
#2	2716.0	5165.7	41117.	3571.4
#3	2695.7	5136.9	40869.	3636.1

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/13/2016 13:47:18 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2488**	**40.12**	**2.007**	**1.984**	**2.013**	**40.31**	**2.033**	**2.018**	**2.022**
Stddev	.0013	.24	.006	.011	.011	.26	.004	.004	.004
%RSD	.5059	.5949	.3207	.5541	.5631	.6510	.1852	.1885	.1990
#1	.2489	40.16	2.014	1.986	2.013	40.32	2.037	2.022	2.026
#2	.2475	39.86	2.001	1.972	2.001	40.04	2.030	2.015	2.022
#3	.2500	40.33	2.007	1.994	2.024	40.56	2.032	2.018	2.018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.997**	**41.56**	**40.35**	**40.12**	**2.057**	**2.018**	**40.19**	**2.034**	**1.993**
Stddev	.011	.19	.17	.17	.003	.003	.22	.003	.003
%RSD	.5356	.4658	.4222	.4195	.1277	.1530	.5496	.1511	.1589
#1	1.994	41.63	40.33	40.13	2.060	2.022	40.13	2.037	1.996
#2	1.988	41.35	40.19	39.95	2.055	2.016	40.00	2.031	1.994
#3	2.009	41.72	40.53	40.29	2.056	2.018	40.43	2.033	1.990
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.004**	**2.011**	**2.079**	**2.032**	**2.018**	**2.062**	**2.006**	**2.032**	**2.040**
Stddev	.004	.009	.007	.002	.008	.003	.007	.005	.002
%RSD	.2064	.4399	.3456	.0874	.4183	.1543	.3271	.2326	.1069
#1	2.007	2.019	2.086	2.034	2.019	2.062	2.011	2.037	2.041
#2	1.999	2.002	2.072	2.031	2.010	2.059	2.008	2.031	2.042
#3	2.006	2.013	2.079	2.031	2.026	2.065	1.998	2.028	2.038
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/13/2016 13:47:18 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2280.7**	**4854.1**	**38294.**	**3478.7**
Stddev	4.5	9.6	125.	14.7
%RSD	.19749	.19802	.32635	.42163
#1	2276.0	4845.0	38321.	3475.9
#2	2281.2	4864.2	38403.	3494.5
#3	2284.9	4853.2	38158.	3465.6

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/13/2016 13:53:44 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0021**	**.0006**	**.0003**	**.0001**	**.0021**	**.0001**	**.0002**	**.0000**
Stddev	.0000	.0049	.0002	.0004	.0000	.0023	.0000	.0001	.0002
%RSD	38.02	233.8	41.42	119.1	45.03	111.5	33.84	35.17	3740.
#1	.0001	.0061	.0007	.0001	.0000	.0030	.0002	.0001	-.0002
#2	.0001	-.0034	.0003	.0008	.0001	-.0006	.0001	.0002	.0001
#3	.0001	.0035	.0008	.0001	.0001	.0038	.0001	.0002	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**.0130**	**-.0190**	**-.0128**	**.0002**	F **.0011**	**-.0564**	**.0000**	**.0006**
Stddev	.0000	.0004	.0252	.0121	.0000	.0001	.0150	.000	.0004
%RSD	11.21	3.113	132.6	94.87	4.724	8.934	26.56	769.0	67.39
#1	.0004	.0134	.0085	-.0255	.0002	.0013	-.0725	-.0001	.0010
#2	.0003	.0129	-.0409	-.0113	.0002	.0011	-.0429	.0002	.0004
#3	.0004	.0126	-.0246	-.0014	.0002	.0011	-.0537	-.0002	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0017**	**.0008**	**.0003**	**.0007**	**.0002**	**.0008**	**.0005**	**.0002**	**.0002**
Stddev	.0007	.0004	.0005	.0001	.0001	.0000	.0003	.0002	.0001
%RSD	39.71	52.51	163.1	15.98	69.70	5.796	54.88	71.28	22.14
#1	.0019	.0003	-.0001	.0008	.0001	.0009	.0002	.0004	.0003
#2	.0009	.0010	.0008	.0006	.0003	.0008	.0007	.0001	.0002
#3	.0022	.0010	.0002	.0008	.0001	.0008	.0007	.0001	.0002
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/13/2016 13:53:44 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2672.1**	**5062.6**	**39989.**	**3567.3**
Stddev	4.7	9.5	29.	22.8
%RSD	.17509	.18825	.07306	.63991
#1	2669.5	5053.2	40018.	3562.2
#2	2677.5	5072.3	39991.	3592.2
#3	2669.3	5062.3	39959.	3547.5

Zoom In Zoom Out

Sample Name: ICV Acquired: 5/13/2016 14:02:35 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2451**	**41.31**	**2.029**	**2.070**	**2.075**	**41.72**	**2.055**	**2.064**	**2.055**
Stddev	.0008	.25	.005	.007	.012	.17	.003	.002	.004
%RSD	.3148	.6165	.2486	.3535	.5522	.4153	.1629	.0855	.2001
#1	.2455	41.18	2.025	2.064	2.074	41.68	2.051	2.062	2.059
#2	.2442	41.14	2.027	2.068	2.064	41.57	2.055	2.065	2.054
#3	.2456	41.60	2.035	2.078	2.087	41.91	2.058	2.066	2.051
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.009**	**41.01**	**42.13**	**42.24**	**2.123**	**1.912**	**42.31**	**2.085**	**2.031**
Stddev	.008	.28	.31	.25	.004	.003	.18	.004	.001
%RSD	.4163	.6705	.7320	.6006	.1809	.1784	.4182	.1784	.0486
#1	2.018	40.87	41.95	42.16	2.126	1.909	42.21	2.081	2.031
#2	2.008	40.83	41.97	42.03	2.123	1.911	42.22	2.088	2.030
#3	2.002	41.33	42.49	42.52	2.119	1.915	42.52	2.087	2.032
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.054**	**2.062**	**.1154**	**2.031**	**1.963**	**1.987**	**2.103**	**1.909**	**2.086**
Stddev	.002	.004	.0010	.002	.010	.004	.005	.000	.003
%RSD	.0776	.2147	.8382	.1068	.4951	.2075	.2443	.0091	.1420
#1	2.053	2.057	.1145	2.029	1.958	1.991	2.108	1.909	2.083
#2	2.054	2.065	.1164	2.030	1.956	1.988	2.097	1.909	2.086
#3	2.056	2.064	.1153	2.033	1.974	1.983	2.104	1.909	2.089
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: ICV Acquired: 5/13/2016 14:02:35 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2288.5**	**4829.7**	**38150.**	**3470.9**
Stddev	.4	6.4	101.	21.8
%RSD	.01668	.13158	.26441	.62713
#1	2288.3	4836.9	38255.	3455.0
#2	2288.9	4827.4	38053.	3495.7
#3	2288.2	4824.8	38144.	3461.9

Zoom In Zoom Out

Sample Name: FA33862-1 Acquired: 5/13/2016 14:13:36 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0000**	**1.162**	**-.0008**	**.0099**	**.0000**	**52.74**	**.0000**	**.0001**	**.0023**
Stddev	.0006	.014	.0004	.0001	.0001	.16	.0001	.0000	.0002
%RSD	2159.	1.182	53.92	.7019	144.3	.2990	194.4	27.33	8.307
#1	-.0004	1.171	-.0009	.0099	.0000	52.89	.0001	.0000	.0021
#2	-.0002	1.146	-.0011	.0098	.0000	52.57	.0000	.0000	.0023
#3	.0007	1.170	-.0003	.0099	.0001	52.77	.0000	.0001	.0025

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0005**	**.5627**	**1.339**	**2.152**	**.0174**	**.0006**	**4.886**	**.0003**	**.0015**
Stddev	.0000	.0088	.017	.020	.0001	.0001	.026	.0002	.0007
%RSD	9.042	1.566	1.238	.9328	.4556	10.26	.5364	55.92	46.66
#1	.0006	.5694	1.329	2.146	.0174	.0006	4.912	.0004	.0009
#2	.0006	.5527	1.331	2.136	.0173	.0005	4.860	.0001	.0022
#3	.0005	.5660	1.359	2.175	.0173	.0006	4.886	.0005	.0013

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0010**	**.0015**	**2.238**	**.0009**	**.1133**	**.0585**	**-.0001**	**.0027**	**.0085**
Stddev	.0005	.0007	.004	.0003	.0002	.0001	.0003	.0002	.0001
%RSD	50.93	50.00	.1571	32.41	.2187	.2006	281.3	6.237	1.303
#1	.0009	.0022	2.240	.0013	.1135	.0585	-.0004	.0026	.0085
#2	.0006	.0007	2.233	.0008	.1130	.0587	-.0003	.0026	.0086
#3	.0016	.0015	2.240	.0007	.1133	.0584	.0003	.0029	.0084

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2542.7**	**5017.6**	**39455.**	**3524.1**
Stddev	2.8	2.4	42.	12.5
%RSD	.11063	.04765	.10622	.35402
#1	2541.5	5017.9	39489.	3537.3
#2	2540.8	5019.8	39408.	3512.5
#3	2545.9	5015.1	39468.	3522.6

Zoom In Zoom Out

Sample Name: FA33862-2 Acquired: 5/13/2016 14:18:04 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0002**	**.0295**	**.0036**	**.0701**	**-.0001**	**292.2**	**-.0001**	**.0000**	**.0002**
Stddev	.0002	.0039	.0005	.0003	.0000	5.2	.0000	.000	.0002
%RSD	134.2	13.24	14.44	.3755	30.57	1.785	10.24	269.6	137.2
#1	.0003	.0251	.0037	.0704	-.0001	287.6	-.0001	.0000	.0003
#2	.0003	.0326	.0041	.0699	-.0001	291.1	-.0001	-.0002	.0002
#3	-.0001	.0307	.0031	.0699	-.0001	297.8	-.0001	.0001	-.0001

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0008**	**12.80**	**4.011**	**9.380**	**.2573**	**.0010**	**F 254.0**	**-.0004**	**-.0007**
Stddev	.0003	.09	.054	.099	.0006	.0001	3.1	.0001	.0008
%RSD	39.63	.7406	1.340	1.057	.2379	8.942	1.223	25.44	122.0
#1	.0005	12.69	3.949	9.274	.2579	.0011	250.5	-.0003	-.0012
#2	.0008	12.86	4.035	9.395	.2567	.0011	254.9	-.0005	.0003
#3	.0011	12.85	4.048	9.471	.2572	.0009	256.5	-.0005	-.0011

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0004**	**.0020**	**4.015**	**.0007**	**.8854**	**.0006**	**.0005**	**.0007**	**.0072**
Stddev	.0003	.0017	.002	.0002	.0036	.0001	.0012	.0004	.0000
%RSD	67.42	83.02	.0533	29.92	.4032	15.75	258.4	60.80	.2184
#1	.0004	.0022	4.017	.0006	.8821	.0005	.0015	.0011	.0073
#2	.0007	.0003	4.012	.0005	.8892	.0007	-.0008	.0005	.0072
#3	.0001	.0036	4.015	.0009	.8850	.0006	.0007	.0004	.0072

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2148.8**	**4489.2**	**35075.**	**3377.4**
Stddev	2.5	4.8	139.	38.2
%RSD	.11853	.10656	.39493	1.1310
#1	2145.9	4483.8	35090.	3414.2
#2	2149.9	4492.8	35205.	3379.9
#3	2150.6	4491.1	34929.	3337.9

Zoom In Zoom Out

Sample Name: FA33862-3 Acquired: 5/13/2016 14:22:50 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0000**	**.0555**	**.0015**	**.0089**	**-.0001**	**69.75**	**-.0001**	**-.0001**	**.0007**
Stddev	.000	.0037	.0001	.0002	.0000	.20	.0000	.0001	.0001
%RSD	20410.	6.690	6.698	2.037	5.184	.2889	44.47	78.61	16.59
#1	.0000	.0563	.0014	.0090	-.0001	69.96	-.0001	-.0002	.0006
#2	-.0003	.0515	.0014	.0089	-.0001	69.56	-.0001	-.0001	.0007
#3	.0003	.0588	.0016	.0087	-.0001	69.72	-.0001	.0000	.0008

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0004**	**12.76**	**1.459**	**4.970**	**.0891**	**.0040**	**23.87**	**-.0003**	**-.0004**
Stddev	.0000	.02	.027	.028	.0003	.0001	.04	.0002	.0006
%RSD	8.882	.1320	1.859	.5536	.2890	2.012	.1762	62.76	169.8
#1	.0004	12.78	1.476	4.967	.0892	.0040	23.90	-.0005	.0000
#2	.0004	12.74	1.428	4.944	.0893	.0039	23.88	-.0001	-.0001
#3	.0004	12.76	1.474	4.999	.0888	.0040	23.82	-.0003	-.0010

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0005**	**.0018**	**2.440**	**.0004**	**.1071**	**.0017**	**-.0008**	**.0019**	**.0066**
Stddev	.0007	.0008	.008	.0003	.0003	.0000	.0009	.0001	.0001
%RSD	143.5	46.79	.3341	60.01	.2957	2.403	120.9	4.703	1.323
#1	.0004	.0015	2.438	.0006	.1073	.0018	-.0004	.0018	.0066
#2	.0013	.0027	2.433	.0001	.1073	.0017	-.0018	.0018	.0067
#3	-.0002	.0011	2.449	.0005	.1068	.0017	-.0001	.0020	.0065

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2498.6**	**4976.3**	**39353.**	**3587.8**
Stddev	5.0	10.4	148.	14.9
%RSD	.19981	.20972	.37489	.41544
#1	2493.5	4979.2	39494.	3576.6
#2	2503.5	4985.0	39200.	3604.7
#3	2498.9	4964.7	39366.	3582.0

Zoom In Zoom Out

Sample Name: FA33862-4 Acquired: 5/13/2016 14:27:17 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0001**	**1.744**	**.0033**	**.0461**	**-.0001**	**345.0**	**-.0001**	**.0001**	**.0047**
Stddev	.0002	.044	.0006	.0005	.0001	4.1	.0000	.0002	.0004
%RSD	345.5	2.511	19.32	1.076	191.0	1.191	39.15	150.5	8.911
#1	-.0003	1.793	.0037	.0466	.0001	347.0	-.0001	.0003	.0044
#2	.0001	1.708	.0026	.0456	-.0001	340.3	-.0002	-.0001	.0046
#3	.0000	1.731	.0037	.0462	-.0002	347.7	-.0001	.0003	.0052

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0029**	**12.60**	**10.13**	**13.65**	**.2516**	**.0027**	**F 450.1**	**-.0001**	**.0013**
Stddev	.0001	.15	.06	.21	.0007	.0001	5.9	.0001	.0003
%RSD	4.816	1.188	.5770	1.503	.2953	4.292	1.301	185.2	23.20
#1	.0028	12.76	10.19	13.82	.2519	.0026	456.2	-.0001	.0010
#2	.0029	12.47	10.08	13.42	.2508	.0026	449.6	.0001	.0013
#3	.0031	12.56	10.14	13.69	.2522	.0028	444.5	-.0002	.0016

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0009**	**.0033**	**3.142**	**.0007**	**.6929**	**.0055**	**.0000**	**.0050**	**.0079**
Stddev	.0004	.0018	.006	.0003	.0057	.0002	.002	.0003	.0000
%RSD	41.94	53.87	.1855	36.06	.8247	3.318	35450.	5.210	.5768
#1	.0012	.0045	3.136	.0010	.6984	.0057	-.0023	.0049	.0079
#2	.0008	.0013	3.148	.0005	.6870	.0053	.0005	.0053	.0079
#3	.0005	.0041	3.143	.0007	.6932	.0055	.0018	.0049	.0078

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2106.3**	**4528.1**	**35078.**	**3427.8**
Stddev	3.3	5.0	115.	32.9
%RSD	.15601	.11056	.32821	.96029
#1	2104.1	4524.0	35022.	3391.8
#2	2104.7	4526.7	35210.	3456.4
#3	2110.1	4533.7	35001.	3435.2

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/13/2016 14:32:00 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0092**	**.2273**	**.0099**	**.2048**	**.0051**	**1.105**	**.0054**	**.0539**	**.0107**
Stddev	.0002	.0012	.0012	.0002	.0001	.016	.0000	.0000	.0001
%RSD	2.000	.5315	12.46	.0958	1.788	1.418	.6665	.0798	1.320
#1	.0094	.2285	.0085	.2048	.0052	1.123	.0054	.0539	.0106
#2	.0091	.2271	.0105	.2046	.0050	1.093	.0053	.0540	.0108
#3	.0091	.2262	.0107	.2050	.0052	1.099	.0054	.0540	.0108
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0268**	**.3262**	**10.35**	**5.230**	**.0168**	**.0494**	**10.40**	**.0435**	**.0053**
Stddev	.0004	.0051	.02	.034	.0002	.0001	.02	.0004	.0002
%RSD	1.519	1.561	.1835	.6446	1.196	.2422	.1497	.8406	4.289
#1	.0264	.3267	10.36	5.269	.0168	.0493	10.38	.0435	.0055
#2	.0271	.3311	10.36	5.206	.0170	.0496	10.40	.0432	.0051
#3	.0271	.3209	10.33	5.216	.0166	.0494	10.41	.0439	.0054
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0052**	**.0098**	**.0511**	**.0525**	**.0103**	**.0105**	**.0101**	**.0491**	**.0225**
Stddev	.0008	.0016	.0003	.0005	.0001	.0000	.0007	.0006	.0001
%RSD	16.12	16.13	.5813	.9436	.7927	.2747	6.935	1.130	.5023
#1	.0043	.0080	.0509	.0520	.0102	.0105	.0109	.0488	.0225
#2	.0059	.0109	.0514	.0530	.0104	.0105	.0095	.0497	.0225
#3	.0055	.0105	.0509	.0524	.0104	.0105	.0100	.0487	.0223
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/13/2016 14:32:00 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2597.0**	**5074.9**	**39583.**	**3533.4**
Stddev	10.1	12.7	139.	38.1
%RSD	.38947	.24934	.35127	1.0783
#1	2603.6	5088.7	39423.	3492.6
#2	2602.1	5072.3	39655.	3568.1
#3	2585.4	5063.8	39671.	3539.3

Zoom In Zoom Out

Sample Name: MP30353-SD1 Acquired: 5/13/2016 14:36:24 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 25.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0062**	**.0341**	**5.112**	**4.120**	**-.0024**	**184.2**	**-.0020**	**.0038**	**.0006**
Stddev	.0102	.0126	.039	.021	.0015	.5	.0020	.0008	.0014
%RSD	164.7	36.78	.7525	.5117	61.73	.2941	100.3	21.95	253.0
#1	.0022	.0277	5.068	4.134	-.0028	184.5	-.0011	.0031	.0006
#2	.0177	.0261	5.135	4.129	-.0036	184.6	-.0006	.0048	.0020
#3	-.0014	.0486	5.135	4.096	-.0007	183.6	-.0042	.0037	-.0009

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0011**	**277.7**	**5.134**	**46.15**	**.0375**	**.0448**	**133.4**	**.0012**	**.0056**
Stddev	.0010	1.2	1.163	.56	.0007	.0042	.6	.0034	.0051
%RSD	97.40	.4220	22.65	1.219	1.937	9.386	.4646	295.6	91.16
#1	.0010	278.8	4.272	46.48	.0369	.0400	133.5	-.0024	.0064
#2	.0001	277.9	4.674	46.46	.0373	.0474	133.9	.0015	.0002
#3	.0021	276.4	6.457	45.50	.0383	.0470	132.7	.0043	.0102

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0007**	**.0372**	**19.00**	**.0076**	**1.004**	**.0123**	**-.0029**	**.0172**	**.1656**
Stddev	.0128	.0191	.05	.0045	.004	.0013	.0182	.0054	.0019
%RSD	1854.	51.42	.2835	59.69	.4370	10.27	624.6	31.30	1.158
#1	.0003	.0559	18.94	.0100	1.007	.0136	.0172	.0150	.1643
#2	-.0119	.0382	19.02	.0104	1.007	.0123	-.0183	.0233	.1647
#3	.0137	.0176	19.05	.0024	.9991	.0110	-.0076	.0132	.1678

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2628.9**	**5074.5**	**40057.**	**3577.1**
Stddev	5.1	13.9	98.	21.3
%RSD	.19290	.27482	.24493	.59629
#1	2628.2	5088.5	39950.	3559.3
#2	2624.2	5060.6	40079.	3571.3
#3	2634.3	5074.3	40143.	3600.7

Zoom In Zoom Out

Sample Name: MP30354-MB1 Acquired: 5/13/2016 14:40:54 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**.0035**	**-.0012**	**.0001**	**-.0001**	**.0030**	**.0000**	**-.0001**	**.0000**
Stddev	.0002	.0097	.0004	.0002	.0001	.0015	.000	.0001	.000
%RSD	173.5	273.4	29.81	178.1	69.97	51.73	90.02	57.65	250.0
#1	-.0003	-.0053	-.0010	-.0001	.0000	.0016	.0000	-.0001	-.0002
#2	.0001	.0138	-.0016	.0003	-.0001	.0046	-.0001	-.0001	.0000
#3	-.0002	.0021	-.0010	.0002	-.0002	.0028	.0000	.0000	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0069**	**-.0067**	**.0065**	**.0000**	**.0000**	**-.0054**	**-.0004**	**.0005**
Stddev	.0001	.0007	.0462	.0200	.000	.000	.0046	.0001	.0003
%RSD	30.91	10.29	687.5	309.3	53.97	202.3	86.07	15.08	51.46
#1	.0002	.0077	-.0594	.0220	-.0001	.0000	-.0023	-.0005	.0008
#2	.0001	.0063	.0270	-.0161	.0000	.0000	-.0107	-.0004	.0006
#3	.0002	.0067	.0122	.0135	.0000	-.0001	-.0031	-.0004	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0011**	**.0011**	**.0076**	**.0000**	**.0000**	**.0000**	**-.0007**	**.0000**	**.0000**
Stddev	.0008	.0007	.0007	.0001	.0000	.000	.0009	.0002	.000
%RSD	71.59	65.06	8.996	349.1	26.53	593.1	129.2	857.1	187.3
#1	.0019	.0008	.0084	.0001	.0000	-.0001	.0002	.0002	.0000
#2	.0005	.0019	.0072	.0001	.0000	.0001	-.0016	.0000	-.0001
#3	.0008	.0006	.0073	-.0001	.0000	.0000	-.0006	-.0002	.0000
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: MP30354-MB1 Acquired: 5/13/2016 14:40:54 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2700.7**	**5132.3**	**40776.**	**3577.9**
Stddev	4.9	10.9	110.	23.9
%RSD	.18161	.21285	.26913	.66781
#1	2695.1	5119.7	40658.	3583.6
#2	2703.5	5139.2	40793.	3551.7
#3	2703.7	5138.0	40875.	3598.4

Zoom In Zoom Out

Sample Name: MP30354-B1 Acquired: 5/13/2016 14:45:28 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0474**	**27.29**	**2.030**	**2.058**	**.0531**	**25.65**	**.0523**	**.5179**	**.2104**
Stddev	.0005	.06	.004	.005	.0002	.05	.0001	.0011	.0005
%RSD	1.097	.2104	.2023	.2399	.3567	.1950	.1257	.2143	.2550
#1	.0477	27.32	2.030	2.063	.0530	25.71	.0523	.5171	.2109
#2	.0468	27.33	2.026	2.054	.0529	25.63	.0523	.5174	.2099
#3	.0478	27.23	2.034	2.057	.0533	25.61	.0524	.5192	.2105
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2625**	**26.38**	**25.51**	**25.11**	**.5426**	**.4942**	**25.52**	**.5298**	**.4974**
Stddev	.0010	.09	.03	.04	.0008	.0014	.06	.0017	.0007
%RSD	.3986	.3233	.1094	.1431	.1478	.2917	.2247	.3230	.1333
#1	.2627	26.46	25.48	25.07	.5427	.4933	25.57	.5283	.4974
#2	.2614	26.29	25.50	25.12	.5417	.4934	25.46	.5294	.4980
#3	.2635	26.39	25.54	25.14	.5433	.4958	25.53	.5317	.4967
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5152**	**2.041**	**.0239**	**.5083**	**.4989**	**.5132**	**2.008**	**.4869**	**.5250**
Stddev	.0022	.015	.0002	.0011	.0017	.0004	.003	.0013	.0012
%RSD	.4250	.7543	.6514	.2242	.3502	.0729	.1538	.2681	.2333
#1	.5169	2.030	.0239	.5078	.4995	.5128	2.009	.4871	.5242
#2	.5160	2.034	.0237	.5076	.4969	.5134	2.004	.4855	.5245
#3	.5127	2.059	.0241	.5096	.5002	.5135	2.010	.4880	.5264
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: MP30354-B1 Acquired: 5/13/2016 14:45:28 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2416.0**	**4922.1**	**38901.**	**3513.2**
Stddev	4.3	6.0	83.	2.7
%RSD	.17689	.12281	.21377	.07592
#1	2415.6	4927.1	38805.	3513.7
#2	2420.4	4923.7	38942.	3510.3
#3	2411.9	4915.4	38956.	3515.6

Zoom In Zoom Out

Sample Name: FA33866-1 Acquired: 5/13/2016 14:49:42 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0000**	**.0525**	**.0005**	**.0580**	**-.0001**	**166.3**	**-.0001**	**.0000**	**.0002**
Stddev	.000	.0076	.0002	.0003	.0001	.1	.0000	.000	.0002
%RSD	362.8	14.42	33.75	.4646	60.91	.0727	22.03	131.8	74.83
#1	-.0001	.0603	.0006	.0580	-.0002	166.4	-.0001	.0000	.0003
#2	.0001	.0451	.0003	.0577	-.0001	166.3	-.0001	-.0001	.0000
#3	-.0001	.0523	.0007	.0582	-.0001	166.2	-.0001	.0000	.0004

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0008**	**1.237**	**1.622**	**7.226**	**.0458**	**.0135**	**25.19**	**.0001**	**.0006**
Stddev	.0002	.009	.008	.032	.0002	.0001	.02	.0002	.0004
%RSD	25.08	.7191	.5132	.4488	.3785	.6460	.0814	380.2	67.14
#1	.0007	1.239	1.627	7.194	.0459	.0136	25.16	.0003	.0001
#2	.0007	1.227	1.626	7.226	.0459	.0136	25.20	.0001	.0008
#3	.0010	1.245	1.613	7.259	.0456	.0134	25.20	-.0002	.0007

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0005**	**.0026**	**5.925**	**.0030**	**.8213**	**.0013**	**.0014**	**.0023**	**.0090**
Stddev	.0005	.0018	.004	.0001	.0015	.0002	.0009	.0002	.0001
%RSD	102.4	70.33	.0640	4.789	.1820	15.03	66.54	9.778	.5777
#1	-.0009	.0030	5.924	.0029	.8201	.0015	.0021	.0026	.0090
#2	-.0005	.0006	5.930	.0032	.8230	.0011	.0004	.0021	.0091
#3	.0000	.0042	5.922	.0029	.8209	.0012	.0016	.0024	.0090

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2408.7**	**4771.8**	**37764.**	**3483.0**
Stddev	7.3	13.5	93.	21.3
%RSD	.30155	.28261	.24609	.61160
#1	2400.6	4757.3	37682.	3460.9
#2	2411.1	4774.1	37745.	3484.9
#3	2414.5	4783.9	37865.	3503.3

Zoom In Zoom Out

Sample Name: MP30354-D1 Acquired: 5/13/2016 14:54:10 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0002**	**.0564**	**-.0008**	**.0595**	**-.0001**	**169.9**	**.0000**	**-.0002**	**.0005**
Stddev	.0004	.0130	.0006	.0004	.0001	.8	.000	.0001	.0001
%RSD	268.7	23.04	69.07	.7125	60.85	.4436	146.0	51.52	22.34
#1	-.0004	.0641	-.0013	.0598	-.0001	170.7	.0000	-.0001	.0006
#2	-.0004	.0414	-.0010	.0598	-.0001	169.9	.0000	-.0003	.0006
#3	.0003	.0638	-.0002	.0590	.0000	169.2	-.0001	-.0001	.0004

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0216**	**1.261**	**1.670**	**7.367**	**.0466**	**.0136**	**25.77**	**.0000**	**.0017**
Stddev	.0003	.006	.016	.009	.0005	.0002	.09	.000	.0006
%RSD	1.389	.4658	.9479	.1252	.9814	1.383	.3623	655.0	38.03
#1	.0212	1.259	1.664	7.368	.0460	.0134	25.70	.0000	.0011
#2	.0218	1.267	1.657	7.375	.0468	.0136	25.87	.0001	.0016
#3	.0218	1.256	1.687	7.357	.0469	.0137	25.74	-.0001	.0024

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0013**	**.0017**	**6.034**	**.0027**	**.8358**	**.0011**	**.0001**	**.0022**	**.0298**
Stddev	.0005	.0012	.010	.0001	.0022	.0001	.0008	.0001	.0002
%RSD	35.87	73.83	.1604	4.629	.2593	9.502	595.1	4.165	.6646
#1	.0018	.0002	6.032	.0026	.8351	.0011	-.0007	.0022	.0296
#2	.0014	.0023	6.044	.0026	.8382	.0012	.0001	.0022	.0300
#3	.0008	.0024	6.025	.0028	.8341	.0010	.0010	.0021	.0299

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2383.3**	**4733.0**	**37429.**	**3442.7**
Stddev	2.3	5.9	148.	32.3
%RSD	.09476	.12507	.39479	.93866
#1	2380.7	4738.7	37592.	3406.9
#2	2384.8	4726.9	37391.	3451.6
#3	2384.3	4733.3	37304.	3469.6

SGS ACCUTEST FA33720

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/13/2016 14:58:37 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2453**	**39.84**	**2.017**	**1.947**	**2.012**	**39.55**	**2.032**	**2.009**	**2.021**
Stddev	.0006	.30	.003	.018	.017	.32	.001	.002	.012
%RSD	.2353	.7566	.1284	.8990	.8309	.8020	.0387	.0794	.5677
#1	.2448	39.52	2.015	1.931	1.995	39.24	2.032	2.009	2.010
#2	.2460	40.12	2.016	1.966	2.028	39.87	2.032	2.007	2.021
#3	.2452	39.88	2.020	1.945	2.014	39.54	2.033	2.010	2.033
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.994**	**41.36**	**40.25**	**39.64**	**2.086**	**2.011**	**40.21**	**2.041**	**1.979**
Stddev	.005	.30	.28	.32	.012	.001	.29	.003	.002
%RSD	.2489	.7134	.7038	.7963	.5510	.0493	.7318	.1460	.0838
#1	1.989	41.03	39.98	39.31	2.081	2.010	39.89	2.043	1.979
#2	1.994	41.59	40.54	39.93	2.079	2.012	40.46	2.037	1.977
#3	1.999	41.45	40.22	39.68	2.100	2.011	40.28	2.041	1.981
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.010**	**2.008**	**2.091**	**2.015**	**2.028**	**2.084**	**1.994**	**2.028**	**2.055**
Stddev	.001	.010	.003	.003	.016	.008	.008	.005	.002
%RSD	.0604	.4895	.1374	.1614	.7916	.3996	.4020	.2467	.0717
#1	2.012	2.015	2.093	2.015	2.012	2.078	1.994	2.024	2.055
#2	2.010	1.997	2.088	2.019	2.044	2.080	1.987	2.027	2.053
#3	2.010	2.013	2.092	2.013	2.028	2.093	2.003	2.033	2.056
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/13/2016 14:58:37 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2309.7**	**4857.5**	**38322.**	**3496.7**
Stddev	4.4	5.9	215.	26.8
%RSD	.19251	.12167	.56157	.76570
#1	2307.6	4854.2	38247.	3524.9
#2	2314.8	4864.3	38564.	3471.5
#3	2306.7	4853.9	38153.	3493.8

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/13/2016 15:02:47 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**.0142**	**.0000**	**.0008**	**.0004**	**.0124**	**.0003**	**.0003**	**.0004**
Stddev	.0004	.0057	.001	.0001	.0000	.0004	.0000	.0001	.0001
%RSD	98.42	39.83	2354.	16.11	3.321	3.051	12.04	23.46	19.96
#1	.0002	.0182	.0000	.0007	.0005	.0128	.0003	.0003	.0003
#2	.0008	.0167	.0009	.0009	.0004	.0123	.0002	.0002	.0004
#3	.0001	.0077	-.0011	.0007	.0004	.0120	.0003	.0002	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005**	**.0214**	**-.0130**	**.0005**	**.0004**	F **.0016**	**-.0286**	**.0002**	**.0007**
Stddev	.0001	.0045	.0344	.0226	.0000	.0003	.0099	.0002	.0005
%RSD	16.75	21.15	265.5	4433.	6.525	21.39	34.45	84.33	62.92
#1	.0006	.0262	.0186	.0232	.0004	.0020	-.0194	.0004	.0002
#2	.0004	.0172	-.0496	-.0220	.0004	.0015	-.0275	.0003	.0011
#3	.0005	.0207	-.0079	.0003	.0004	.0013	-.0390	.0000	.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0010**	F **.0021**	**.0005**	**.0006**	**.0005**	**.0013**	**.0000**	**.0005**	**.0003**
Stddev	.0003	.0007	.0006	.0003	.0000	.0002	.001	.0002	.0002
%RSD	28.17	30.54	123.6	58.72	7.800	15.63	4252.	37.36	54.02
#1	.0008	.0024	.0003	.0007	.0005	.0015	-.0015	.0004	.0005
#2	.0013	.0026	.0012	.0008	.0005	.0013	.0011	.0003	.0003
#3	.0009	.0014	.0000	.0002	.0005	.0011	.0004	.0007	.0002
Check ?	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.0020							
Low Limit		-.0020							

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/13/2016 15:02:47 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2702.8**	**5093.7**	**40563.**	**3622.9**
Stddev	4.7	9.1	136.	45.2
%RSD	.17392	.17792	.33408	1.2471
#1	2705.1	5097.5	40690.	3578.3
#2	2705.9	5100.2	40420.	3668.6
#3	2697.4	5083.3	40578.	3621.8

Zoom In Zoom Out

Sample Name: MP30354-SD1 Acquired: 5/13/2016 15:07:21 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0013**	**.0861**	**.0021**	**.0604**	**-.0001**	**167.3**	**.0001**	**-.0008**	**.0005**
Stddev	.0000	.0294	.0030	.0015	.0001	.7	.0002	.0007	.0012
%RSD	1.205	34.17	143.7	2.404	59.57	.4430	357.3	89.10	254.6
#1	.0013	.1192	.0035	.0604	-.0002	168.0	.0002	-.0002	-.0005
#2	.0013	.0761	.0041	.0589	-.0001	167.4	-.0002	-.0015	.0001
#3	.0013	.0629	-.0014	.0618	-.0001	166.6	.0001	-.0006	.0019

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0018**	**1.260**	**1.532**	**7.415**	**.0473**	**.0153**	**25.14**	**-.0006**	**.0011**
Stddev	.0008	.019	.051	.192	.0002	.0009	.12	.0006	.0010
%RSD	44.81	1.517	3.319	2.590	.3600	5.963	.4931	97.66	90.68
#1	.0026	1.240	1.559	7.526	.0474	.0154	25.27	-.0008	.0022
#2	.0020	1.277	1.473	7.526	.0473	.0161	25.02	.0001	.0005
#3	.0010	1.264	1.563	7.193	.0471	.0143	25.12	-.0010	.0005

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0018**	**.0009**	**5.998**	**.0039**	**.8388**	**.0054**	**-.0024**	**.0023**	**.0307**
Stddev	.0039	.0030	.001	.0010	.0038	.0001	.0036	.0010	.0001
%RSD	218.1	323.2	.0192	24.91	.4532	1.613	149.1	43.60	.3571
#1	-.0039	.0044	5.998	.0028	.8432	.0054	.0017	.0025	.0307
#2	-.0042	-.0002	6.000	.0045	.8360	.0053	-.0045	.0032	.0309
#3	.0027	-.0014	5.997	.0043	.8373	.0054	-.0044	.0012	.0307

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2579.8**	**4951.1**	**39158.**	**3547.2**
Stddev	4.2	10.7	162.	43.8
%RSD	.16364	.21628	.41448	1.2343
#1	2580.2	4943.3	39057.	3526.0
#2	2575.4	4946.8	39071.	3518.1
#3	2583.8	4963.3	39345.	3597.6

Zoom In Zoom Out

Sample Name: MP30354-PS1 Acquired: 5/13/2016 15:11:51 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0489**	**2.645**	**.1090**	**.3189**	**.0525**	**168.4**	**.0530**	**.0526**	**.0546**
Stddev	.0005	.009	.0012	.0016	.0004	.7	.0001	.0003	.0003
%RSD	.9957	.3488	1.109	.5162	.7364	.4144	.1055	.5806	.5785
#1	.0494	2.652	.1085	.3205	.0529	169.2	.0530	.0523	.0542
#2	.0486	2.635	.1104	.3172	.0521	167.9	.0529	.0526	.0548
#3	.0485	2.648	.1082	.3190	.0526	168.1	.0529	.0529	.0547

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.1094**	**4.296**	**11.93**	**12.08**	**.1014**	**.1155**	**35.50**	**.1062**	**.0504**
Stddev	.0003	.016	.11	.01	.0004	.0004	.18	.0002	.0001
%RSD	.3072	.3804	.9178	.1086	.3618	.3129	.5062	.1914	.1953
#1	.1098	4.305	12.05	12.09	.1010	.1153	35.70	.1059	.0504
#2	.1092	4.277	11.90	12.07	.1016	.1152	35.35	.1063	.0505
#3	.1094	4.307	11.84	12.07	.1016	.1159	35.45	.1063	.0503

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.1131**	**.1087**	**5.942**	**.0520**	**.8682**	**.1087**	**.0978**	**.0536**	**.2824**
Stddev	.0008	.0012	.004	.0002	.0039	.0006	.0006	.0004	.0005
%RSD	.6941	1.109	.0699	.4157	.4492	.5402	.6535	.8079	.1897
#1	.1133	.1099	5.939	.0520	.8727	.1080	.0973	.0531	.2819
#2	.1138	.1088	5.940	.0518	.8660	.1091	.0977	.0536	.2822
#3	.1122	.1075	5.947	.0523	.8659	.1090	.0985	.0540	.2830

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2326.3**	**4690.9**	**37037.**	**3480.2**
Stddev	2.9	8.6	83.	12.1
%RSD	.12582	.18352	.22451	.34879
#1	2327.7	4696.0	37048.	3470.6
#2	2328.2	4695.7	36948.	3493.8
#3	2322.9	4680.9	37113.	3476.1

Zoom In Zoom Out

Sample Name: MP30354-S1 Acquired: 5/13/2016 15:16:11 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0484**	**27.75**	**2.076**	**2.124**	**.0539**	**190.8**	**.0511**	**.5038**	**.2087**
Stddev	.0008	.18	.008	.009	.0002	1.2	.0000	.0006	.0014
%RSD	1.578	.6662	.3994	.4257	.4228	.6313	.0839	.1136	.6625
#1	.0479	27.94	2.067	2.134	.0541	192.1	.0511	.5034	.2103
#2	.0480	27.75	2.081	2.122	.0541	190.7	.0511	.5035	.2077
#3	.0493	27.57	2.081	2.117	.0537	189.7	.0512	.5045	.2081

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.2668**	**27.70**	**27.96**	**32.08**	**.5868**	**.5033**	**51.83**	**.5164**	**.4988**
Stddev	.0006	.11	.08	.27	.0042	.0015	.27	.0008	.0021
%RSD	.2071	.3858	.2878	.8413	.7109	.2960	.5154	.1469	.4294
#1	.2667	27.82	28.05	32.38	.5914	.5019	52.08	.5156	.5005
#2	.2663	27.63	27.96	32.03	.5859	.5032	51.88	.5166	.4964
#3	.2674	27.65	27.89	31.84	.5832	.5049	51.55	.5170	.4996

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.5242**	**2.075**	**5.938**	**.4957**	**1.338**	**.5228**	**1.996**	**.4921**	**.5209**
Stddev	.0019	.002	.011	.0009	.004	.0029	.006	.0017	.0016
%RSD	.3618	.1142	.1896	.1858	.3184	.5533	.2831	.3448	.2989
#1	.5230	2.072	5.926	.4955	1.342	.5260	1.998	.4940	.5198
#2	.5232	2.075	5.941	.4948	1.339	.5222	1.990	.4909	.5203
#3	.5264	2.077	5.948	.4966	1.333	.5203	2.000	.4912	.5227

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2237.7**	**4722.7**	**37073.**	**3404.2**
Stddev	3.7	14.3	200.	41.5
%RSD	.16534	.30182	.53981	1.2187
#1	2236.6	4738.4	36844.	3357.8
#2	2234.7	4710.6	37158.	3417.2
#3	2241.8	4719.0	37216.	3437.7

Zoom In Zoom Out

Sample Name: MP30354-S2 Acquired: 5/13/2016 15:20:24 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0484**	**27.21**	**2.040**	**2.073**	**.0532**	**187.1**	**.0503**	**.4954**	**.2050**
Stddev	.0002	.03	.001	.005	.0002	.3	.0002	.0004	.0006
%RSD	.3921	.1018	.0222	.2543	.3877	.1862	.3626	.0765	.2848
#1	.0484	27.19	2.041	2.067	.0529	186.7	.0505	.4959	.2057
#2	.0486	27.21	2.040	2.075	.0533	187.4	.0501	.4952	.2046
#3	.0482	27.24	2.040	2.077	.0533	187.1	.0504	.4953	.2048

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.2611**	**27.11**	**27.52**	**31.58**	**.5783**	**.4938**	**50.83**	**.5089**	**.4910**
Stddev	.0009	.06	.02	.08	.0016	.0002	.09	.0010	.0002
%RSD	.3442	.2366	.0713	.2392	.2711	.0304	.1812	.1931	.0350
#1	.2615	27.05	27.52	31.57	.5800	.4939	50.72	.5097	.4908
#2	.2601	27.17	27.54	31.66	.5778	.4937	50.87	.5078	.4911
#3	.2617	27.12	27.50	31.51	.5770	.4937	50.89	.5092	.4909

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.5172**	**2.040**	**5.837**	**.4857**	**1.310**	**.5128**	**1.970**	**.4845**	**.5141**
Stddev	.0018	.004	.012	.0009	.003	.0007	.002	.0007	.0014
%RSD	.3471	.1746	.2057	.1759	.2492	.1341	.0821	.1538	.2751
#1	.5192	2.039	5.851	.4859	1.307	.5136	1.971	.4848	.5157
#2	.5162	2.044	5.834	.4865	1.312	.5123	1.968	.4837	.5130
#3	.5160	2.037	5.827	.4848	1.313	.5126	1.971	.4851	.5135

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2272.9**	**4794.3**	**37575.**	**3448.4**
Stddev	5.3	5.9	91.	6.6
%RSD	.23106	.12318	.24210	.19177
#1	2267.1	4787.6	37497.	3449.1
#2	2274.5	4796.5	37675.	3441.5
#3	2277.2	4798.8	37553.	3454.6

Zoom In Zoom Out

Sample Name: FA33866-2 Acquired: 5/13/2016 15:24:37 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0001**	**.6735**	**.0016**	**.0182**	**-.0001**	**82.60**	**.0000**	**.0000**	**.0045**
Stddev	.0001	.0064	.0004	.0002	.0000	.32	.000	.0001	.0003
%RSD	99.62	.9499	26.25	.8572	15.05	.3886	69.92	624.2	7.152
#1	.0001	.6669	.0018	.0181	-.0001	82.89	.0000	.0001	.0047
#2	.0000	.6797	.0018	.0183	-.0001	82.66	.0000	.0000	.0042
#3	.0001	.6738	.0011	.0183	-.0001	82.25	.0000	-.0001	.0047

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0019**	**.0238**	**11.13**	**2.873**	**.0019**	**.0332**	**15.47**	**.0002**	**-.0002**
Stddev	.0001	.0017	.07	.039	.0000	.0002	.06	.0002	.0011
%RSD	2.812	7.175	.6398	1.345	1.235	.4846	.3924	102.8	496.2
#1	.0019	.0223	11.08	2.881	.0019	.0330	15.40	.0003	.0009
#2	.0019	.0234	11.21	2.831	.0019	.0333	15.50	.0000	-.0011
#3	.0018	.0257	11.10	2.907	.0020	.0332	15.50	.0001	-.0004

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0016**	**.0047**	**3.852**	**.0030**	**.3927**	**.0018**	**-.0001**	**.0219**	**.0084**
Stddev	.0004	.0017	.006	.0003	.0018	.0000	.0011	.0001	.0001
%RSD	21.39	36.43	.1682	9.762	.4627	.6847	739.4	.2761	.9291
#1	.0015	.0048	3.845	.0027	.3906	.0018	-.0012	.0219	.0084
#2	.0020	.0063	3.856	.0032	.3935	.0018	.0009	.0219	.0083
#3	.0014	.0029	3.855	.0032	.3940	.0018	-.0002	.0220	.0084

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2462.9**	**4842.2**	**38319.**	**3492.9**
Stddev	3.6	6.6	33.	24.2
%RSD	.14779	.13659	.08653	.69175
#1	2467.1	4849.0	38352.	3473.6
#2	2460.8	4841.7	38317.	3485.0
#3	2460.8	4835.9	38286.	3520.0

Zoom In Zoom Out

Sample Name: FA33866-3 Acquired: 5/13/2016 15:29:08 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0001**	**.1905**	**.0018**	**.0396**	**-.0001**	**115.6**	**-.0001**	**-.0001**	**.0010**
Stddev	.0002	.0016	.0011	.0005	.0001	.3	.0000	.0001	.0001
%RSD	198.4	.8284	57.73	1.384	82.84	.2651	58.35	58.17	10.24
#1	-.0001	.1917	.0019	.0390	-.0002	115.4	.0000	-.0002	.0010
#2	.0001	.1911	.0028	.0400	.0000	116.0	-.0001	-.0001	.0009
#3	.0003	.1887	.0007	.0399	-.0001	115.5	-.0001	-.0001	.0011

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0017**	**.2548**	**8.833**	**7.918**	**.0399**	**.0497**	**30.45**	**.0003**	**.0001**
Stddev	.0003	.0034	.024	.043	.0002	.0002	.05	.0001	.0003
%RSD	14.42	1.350	.2689	.5484	.4652	.3727	.1623	21.83	375.6
#1	.0020	.2517	8.807	7.892	.0401	.0497	30.46	.0003	.0002
#2	.0015	.2585	8.840	7.894	.0397	.0499	30.49	.0004	-.0002
#3	.0018	.2541	8.852	7.968	.0400	.0495	30.39	.0002	.0002

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0012**	**.0043**	**4.223**	**.0027**	**.6213**	**.0027**	**-.0003**	**.0059**	**.0151**
Stddev	.0003	.0001	.012	.0001	.0014	.0007	.0012	.0002	.0001
%RSD	28.42	1.639	.2874	5.241	.2298	24.06	363.4	3.754	.4313
#1	.0013	.0043	4.233	.0028	.6207	.0035	.0007	.0058	.0152
#2	.0014	.0042	4.226	.0029	.6229	.0024	.0000	.0058	.0150
#3	.0008	.0042	4.210	.0026	.6203	.0023	-.0016	.0062	.0150

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2400.9**	**4741.8**	**37580.**	**3465.2**
Stddev	2.6	10.1	112.	4.6
%RSD	.10710	.21294	.29799	.13189
#1	2398.2	4730.4	37596.	3469.9
#2	2401.3	4745.5	37682.	3460.8
#3	2403.3	4749.6	37460.	3464.9

Zoom In Zoom Out

Sample Name: FA33866-4 Acquired: 5/13/2016 15:33:37 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0004**	**.0356**	**.0014**	**.0427**	**-.0001**	**120.5**	**-.0001**	**-.0001**	**.0002**
Stddev	.0002	.0043	.0002	.0003	.0000	.7	.0000	.0002	.0002
%RSD	40.87	12.12	12.37	.7777	54.44	.5648	42.72	237.8	102.0
#1	.0005	.0374	.0013	.0425	-.0001	120.0	.0000	-.0002	.0004
#2	.0004	.0307	.0014	.0426	-.0001	120.3	-.0001	-.0001	.0000
#3	.0002	.0388	.0016	.0431	-.0001	121.3	-.0001	.0001	.0003

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0010**	**.2441**	**5.714**	**5.625**	**.0340**	**.0192**	**24.12**	**.0001**	**.0001**
Stddev	.0003	.0019	.068	.058	.0001	.0001	.09	.0001	.0004
%RSD	26.70	.7785	1.181	1.033	.3161	.3621	.3538	79.58	554.9
#1	.0011	.2419	5.649	5.580	.0342	.0192	24.05	.0002	.0003
#2	.0007	.2456	5.710	5.603	.0339	.0192	24.10	.0000	.0003
#3	.0011	.2447	5.784	5.690	.0340	.0191	24.22	.0001	-.0004

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0017**	**.0026**	**3.528**	**.0013**	**.4424**	**.0009**	**-.0004**	**.0037**	**.0062**
Stddev	.0001	.0014	.009	.0001	.0018	.0001	.0006	.0002	.0000
%RSD	8.566	54.39	.2501	6.109	.4033	10.18	184.0	4.993	.5277
#1	.0018	.0011	3.530	.0012	.4408	.0008	-.0001	.0036	.0062
#2	.0016	.0028	3.518	.0013	.4419	.0009	-.0011	.0037	.0062
#3	.0018	.0039	3.536	.0013	.4443	.0009	.0002	.0039	.0061

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2384.4**	**4728.5**	**37524.**	**3433.3**
Stddev	7.6	14.7	125.	23.1
%RSD	.31918	.31075	.33423	.67376
#1	2383.7	4727.3	37411.	3459.9
#2	2392.4	4743.8	37659.	3418.3
#3	2377.2	4714.5	37503.	3421.6

Zoom In Zoom Out

Sample Name: FA33866-5 Acquired: 5/13/2016 15:38:05 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0000**	**.0670**	**.0002**	**.0226**	**-.0001**	**102.6**	**-.0001**	**-.0001**	**.0005**
Stddev	.000	.0058	.0006	.0003	.0001	.4	.0001	.0001	.0001
%RSD	1563.	8.664	267.9	1.185	49.90	.3765	78.93	40.12	24.89
#1	-.0001	.0713	-.0003	.0229	-.0001	102.1	.0000	-.0001	.0007
#2	.0002	.0692	.0002	.0226	-.0002	102.8	.0000	-.0001	.0005
#3	-.0001	.0604	.0008	.0223	-.0001	102.8	-.0001	-.0002	.0004

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0014**	**1.460**	**3.073**	**5.771**	**.0657**	**.0102**	**24.90**	**.0001**	**-.0002**
Stddev	.0002	.004	.023	.039	.0002	.0001	.01	.0001	.0006
%RSD	11.23	.2972	.7615	.6752	.3799	1.267	.0460	103.3	388.5
#1	.0016	1.460	3.063	5.726	.0657	.0104	24.92	.0000	.0002
#2	.0013	1.456	3.100	5.794	.0654	.0101	24.90	.0000	.0002
#3	.0013	1.465	3.056	5.793	.0659	.0103	24.90	.0002	-.0008

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0014**	**.0018**	**4.576**	**.0016**	**.4121**	**.0015**	**-.0010**	**.0024**	**.0094**
Stddev	.0011	.0010	.017	.0005	.0007	.0003	.0009	.0001	.0000
%RSD	78.22	56.53	.3607	28.37	.1745	17.39	93.31	2.411	.4929
#1	.0027	.0015	4.557	.0018	.4113	.0013	-.0002	.0023	.0094
#2	.0005	.0029	4.583	.0020	.4124	.0019	-.0019	.0023	.0094
#3	.0011	.0010	4.588	.0011	.4127	.0015	-.0008	.0024	.0094

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2421.7**	**4794.4**	**37950.**	**3466.2**
Stddev	2.1	13.4	130.	29.4
%RSD	.08663	.27985	.34205	.84827
#1	2420.7	4809.8	37849.	3499.9
#2	2424.1	4788.0	38097.	3446.1
#3	2420.3	4785.4	37905.	3452.5

Zoom In Zoom Out

Sample Name: FA33866-6 Acquired: 5/13/2016 15:42:35 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0002	.0826	.0009	.0655	-.0001	95.21	.0000	.0000	.0005
Stddev	.0001	.0012	.0006	.0004	.0000	.05	.000	.0000	.0001
%RSD	26.84	1.402	66.50	.6446	6.877	.0542	340.3	100.8	13.78
#1	.0003	.0835	.0003	.0658	-.0001	95.20	.0000	.0000	.0005
#2	.0002	.0813	.0008	.0650	-.0001	95.26	-.0001	.0000	.0006
#3	.0002	.0831	.0016	.0657	-.0001	95.16	.0000	.0001	.0006

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0015	.5498	4.783	4.983	.0928	.0278	24.06	.0002	-.0002
Stddev	.0002	.0023	.025	.047	.0004	.0001	.03	.0001	.0002
%RSD	10.73	.4163	.5150	.9371	.4143	.4901	.1050	56.07	110.3
#1	.0017	.5503	4.796	4.989	.0931	.0280	24.06	.0004	-.0001
#2	.0015	.5473	4.798	5.027	.0924	.0277	24.04	.0002	.0000
#3	.0014	.5518	4.754	4.934	.0928	.0278	24.09	.0001	-.0003

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0011	.0018	4.884	.0015	.4268	.0019	-.0007	.0077	.0104
Stddev	.0006	.0010	.015	.0001	.0004	.0002	.0009	.0002	.0001
%RSD	51.22	55.88	.2996	9.636	.0949	10.39	126.2	2.689	.7403
#1	.0011	.0029	4.898	.0016	.4267	.0021	-.0017	.0079	.0104
#2	.0016	.0016	4.868	.0013	.4272	.0017	.0001	.0075	.0103
#3	.0005	.0009	4.885	.0015	.4264	.0018	-.0005	.0077	.0104

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2437.6	4812.4	38251.	3506.5
Stddev	3.6	9.6	130.	16.7
%RSD	.14827	.19984	.33889	.47554
#1	2434.5	4801.6	38169.	3520.4
#2	2441.6	4820.1	38400.	3488.0
#3	2436.7	4815.5	38183.	3511.2

Zoom In Zoom Out

Sample Name: FA33866-7 Acquired: 5/13/2016 15:47:03 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0001	.1371	.0007	.1505	-.0001	87.38	.0000	.0002	.0008
Stddev	.0002	.0119	.0006	.0007	.0000	.51	.000	.0001	.0001
%RSD	170.1	8.709	77.09	.4398	40.92	.5881	523.7	83.97	17.27
#1	.0001	.1508	.0005	.1501	-.0001	87.03	.0000	.0001	.0007
#2	-.0001	.1299	.0003	.1513	-.0001	87.97	.0000	.0003	.0010
#3	-.0004	.1305	.0014	.1502	-.0001	87.13	.0000	.0000	.0008

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0029	.2483	2.220	11.11	.0284	.0031	13.22	.0005	.0014
Stddev	.0002	.0057	.030	.08	.0002	.0001	.06	.0001	.0012
%RSD	6.537	2.313	1.360	.7209	.7777	2.953	.4718	12.72	87.87
#1	.0027	.2432	2.215	11.07	.0282	.0030	13.15	.0006	.0010
#2	.0030	.2473	2.252	11.20	.0284	.0030	13.27	.0006	.0027
#3	.0029	.2545	2.192	11.06	.0287	.0031	13.24	.0005	.0004

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0026	.0044	7.536	.0004	.6293	.0025	-.0013	.0055	.0395
Stddev	.0008	.0005	.007	.0002	.0011	.0001	.0011	.0001	.0001
%RSD	31.46	10.64	.0954	52.44	.1705	2.372	81.89	1.910	.2875
#1	.0019	.0047	7.540	.0004	.6286	.0024	-.0017	.0055	.0396
#2	.0035	.0039	7.540	.0002	.6305	.0025	-.0001	.0054	.0394
#3	.0025	.0047	7.527	.0006	.6286	.0025	-.0021	.0056	.0394

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2451.6	4868.9	38592.	3432.8
Stddev	2.9	3.9	291.	42.5
%RSD	.11907	.07950	.75509	1.2395
#1	2454.1	4869.4	38925.	3475.0
#2	2452.1	4872.4	38473.	3389.9
#3	2448.4	4864.7	38380.	3433.5

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/13/2016 15:51:30 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2499	40.95	2.029	1.998	2.063	40.68	2.049	2.035	2.063
Stddev	.0007	.15	.007	.002	.007	.25	.009	.008	.004
%RSD	.2985	.3770	.3709	.0975	.3483	.6201	.4200	.3967	.2155
#1	.2490	40.92	2.033	1.996	2.060	40.71	2.056	2.041	2.063
#2	.2504	40.81	2.034	2.000	2.057	40.42	2.052	2.037	2.058
#3	.2503	41.12	2.020	1.999	2.071	40.92	2.040	2.025	2.067
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.035	42.45	41.17	41.08	2.124	2.040	41.09	2.053	1.995
Stddev	.005	.20	.10	.25	.006	.004	.11	.009	.006
%RSD	.2268	.4726	.2499	.6019	.2641	.2084	.2731	.4490	.2939
#1	2.034	42.39	41.17	41.16	2.125	2.044	41.01	2.060	1.999
#2	2.040	42.29	41.06	40.81	2.118	2.041	41.05	2.056	1.998
#3	2.032	42.67	41.27	41.29	2.129	2.036	41.22	2.042	1.988
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.027	2.025	2.113	2.044	2.070	2.121	2.009	2.064	2.063
Stddev	.002	.003	.009	.008	.005	.002	.009	.003	.012
%RSD	.0998	.1589	.4327	.3832	.2208	.0878	.4563	.1568	.5693
#1	2.028	2.022	2.119	2.049	2.067	2.119	2.012	2.061	2.073
#2	2.027	2.027	2.116	2.047	2.068	2.120	2.017	2.068	2.067
#3	2.024	2.028	2.102	2.035	2.075	2.123	1.999	2.063	2.050
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/13/2016 15:51:30 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2272.8	4795.2	37600.	3383.7
Stddev	6.0	18.7	112.	25.1
%RSD	.26225	.39011	.29756	.74242
#1	2272.3	4786.3	37472.	3390.8
#2	2267.1	4782.5	37682.	3404.6
#3	2279.0	4816.6	37644.	3355.8

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/13/2016 15:55:41 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**.0115**	**.0005**	**.0006**	**.0003**	**.0096**	**.0002**	**.0002**	**.0002**
Stddev	.0003	.0047	.0006	.0003	.0001	.0016	.0000	.0001	.0002
%RSD	70.92	41.17	105.8	41.39	24.20	16.16	23.96	84.25	118.4
#1	.0005	.0061	.0001	.0009	.0004	.0105	.0002	.0003	.0001
#2	.0001	.0137	.0004	.0004	.0003	.0078	.0002	.0002	.0005
#3	.0005	.0147	.0011	.0005	.0003	.0105	.0001	.0000	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0202**	**-.0118**	**-.0156**	**.0002**	F **.0015**	**-.0491**	**.0000**	**.0008**
Stddev	.0000	.0022	.0162	.0052	.0001	.0003	.0052	.000	.0003
%RSD	14.22	10.93	137.6	33.57	21.07	21.73	10.51	170.6	32.35
#1	.0003	.0219	-.0300	-.0128	.0003	.0019	-.0470	-.0001	.0010
#2	.0004	.0177	.0012	-.0124	.0002	.0014	-.0453	.0000	.0009
#3	.0003	.0211	-.0067	-.0216	.0002	.0013	-.0549	.0000	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0017**	**-.0005**	**.0007**	**.0006**	**.0004**	**.0012**	**.0007**	**.0002**	**.0003**
Stddev	.0002	.0004	.0005	.0002	.0002	.0001	.0001	.0002	.0001
%RSD	11.01	92.27	67.10	28.39	42.29	8.853	14.46	99.29	23.88
#1	.0019	-.0009	.0012	.0007	.0004	.0013	.0007	.0004	.0002
#2	.0015	-.0002	.0008	.0007	.0006	.0012	.0006	.0003	.0003
#3	.0016	-.0002	.0002	.0004	.0002	.0011	.0008	.0000	.0003
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/13/2016 15:55:41 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2657.8**	**5052.2**	**39936.**	**3538.1**
Stddev	2.6	5.2	102.	6.2
%RSD	.09911	.10207	.25589	.17616
#1	2654.8	5057.9	40042.	3542.5
#2	2659.8	5047.8	39839.	3540.7
#3	2658.8	5051.1	39926.	3530.9

Zoom In Zoom Out

Sample Name: FA33866-8 Acquired: 5/13/2016 16:00:15 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0002**	**.0335**	**.0047**	**.1021**	**-.0001**	**174.2**	**.0000**	**-.0002**	**.0003**
Stddev	.0003	.0041	.0004	.0002	.0001	.4	.000	.0000	.0002
%RSD	166.0	12.18	7.822	.2391	57.71	.2343	181.8	16.52	72.65
#1	.0004	.0373	.0051	.1019	-.0001	173.9	-.0001	-.0002	.0006
#2	-.0001	.0292	.0044	.1020	.0000	174.1	.0000	-.0002	.0002
#3	.0001	.0341	.0046	.1023	-.0001	174.7	-.0001	-.0002	.0002

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0005**	**.7348**	**6.335**	**8.071**	**.0084**	**.0145**	**37.69**	**.0000**	**.0003**
Stddev	.0001	.0042	.039	.051	.0001	.0002	.22	.0001	.0009
%RSD	17.82	.5745	.6091	.6385	.6280	1.603	.5919	336.9	359.4
#1	.0006	.7352	6.291	8.013	.0084	.0147	37.46	.0001	.0001
#2	.0006	.7304	6.359	8.088	.0084	.0142	37.71	-.0001	.0012
#3	.0004	.7388	6.357	8.112	.0085	.0145	37.91	.0000	-.0006

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0001**	**.0017**	**8.032**	**.0005**	**.8781**	**.0012**	**-.0002**	**.0015**	**.0067**
Stddev	.0008	.0012	.016	.0001	.0041	.0001	.0010	.0002	.0000
%RSD	940.9	69.07	.2039	22.22	.4721	9.296	477.4	15.72	.5716
#1	-.0007	.0025	8.051	.0005	.8743	.0011	-.0002	.0015	.0067
#2	.0001	.0004	8.020	.0005	.8775	.0012	.0007	.0012	.0067
#3	.0009	.0022	8.025	.0007	.8825	.0013	-.0012	.0017	.0067

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2335.4**	**4677.7**	**36505.**	**3362.6**
Stddev	4.1	12.3	197.	12.4
%RSD	.17606	.26231	.54096	.36782
#1	2330.8	4663.9	36277.	3376.9
#2	2338.6	4687.4	36620.	3355.4
#3	2336.8	4681.9	36619.	3355.5

Zoom In Zoom Out

Sample Name: FA33866-9 Acquired: 5/13/2016 16:04:45 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0001**	**.0320**	**-.0015**	**.0159**	**-.0001**	**153.9**	**.0005**	**-.0001**	**.0005**
Stddev	.0005	.0065	.0001	.0002	.0000	.9	.0000	.0001	.0003
%RSD	611.2	20.46	9.297	1.061	27.73	.5876	9.228	70.44	49.33
#1	.0003	.0362	-.0015	.0158	-.0001	153.5	.0005	-.0002	.0008
#2	-.0005	.0354	-.0016	.0161	-.0001	154.9	.0005	.0000	.0004
#3	.0004	.0245	-.0013	.0158	-.0001	153.3	.0004	-.0002	.0003

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0006**	**.0540**	**2.318**	**14.62**	**.0067**	**.0006**	F **91.00**	**-.0004**	**.0076**
Stddev	.0000	.0014	.034	.04	.0000	.0000	.40	.0001	.0005
%RSD	6.250	2.501	1.460	.2575	.1667	6.625	.4420	18.51	6.548
#1	.0006	.0525	2.303	14.62	.0067	.0006	90.75	-.0005	.0078
#2	.0006	.0552	2.356	14.66	.0067	.0007	91.47	-.0004	.0070
#3	.0005	.0544	2.293	14.59	.0067	.0006	90.79	-.0004	.0080

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0008**	**.0041**	**11.28**	**.0005**	**.8861**	**.0021**	**-.0024**	**.0006**	**.0277**
Stddev	.0009	.0016	.04	.0002	.0035	.0004	.0002	.0000	.0001
%RSD	110.0	38.19	.3439	35.24	.3922	17.20	9.347	3.930	.2963
#1	.0016	.0058	11.29	.0007	.8839	.0018	-.0022	.0005	.0277
#2	.0009	.0026	11.24	.0003	.8901	.0025	-.0026	.0006	.0277
#3	-.0001	.0040	11.32	.0006	.8844	.0019	-.0025	.0006	.0276

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2306.6**	**4712.2**	**36995.**	**3447.8**
Stddev	5.5	15.2	113.	27.5
%RSD	.23653	.32308	.30595	.79738
#1	2302.4	4712.5	36887.	3448.4
#2	2312.8	4727.3	37113.	3420.0
#3	2304.7	4696.9	36985.	3475.0

SGS ACCUTEST FA33720

Zoom In Zoom Out

Sample Name: FA33866-10 Acquired: 5/13/2016 16:09:16 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0000**	**.0365**	**.0100**	**.0641**	**-.0001**	**151.1**	**-.0001**	**.0004**	**.0003**
Stddev	.000	.0112	.0008	.0008	.0000	.6	.0000	.0001	.0001
%RSD	723.5	30.79	7.788	1.209	44.95	.4045	29.69	15.79	39.32
#1	-.0003	.0493	.0109	.0636	-.0001	150.7	-.0001	.0004	.0003
#2	.0002	.0317	.0097	.0650	-.0001	151.8	-.0001	.0005	.0002
#3	.0000	.0285	.0094	.0637	.0000	150.7	-.0001	.0003	.0004

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0006**	**2.944**	**6.092**	**7.264**	**.1176**	**.0044**	**19.00**	**.0004**	**.0001**
Stddev	.0003	.011	.062	.088	.0004	.0002	.12	.0001	.0004
%RSD	49.97	.3669	1.016	1.206	.3742	4.244	.6250	24.77	426.0
#1	.0004	2.935	6.074	7.257	.1180	.0042	18.91	.0005	.0005
#2	.0004	2.956	6.161	7.355	.1175	.0045	19.13	.0003	.0000
#3	.0009	2.942	6.042	7.180	.1171	.0046	18.95	.0005	-.0002

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0007**	**.0038**	**6.071**	**.0005**	**.6122**	**.0011**	**-.0001**	**.0012**	**.0219**
Stddev	.0007	.0011	.003	.0003	.0042	.0000	.0003	.0002	.0002
%RSD	95.92	30.22	.0510	54.72	.6821	4.359	222.3	13.15	.7099
#1	.0003	.0043	6.072	.0005	.6102	.0011	.0002	.0014	.0220
#2	.0003	.0046	6.068	.0002	.6170	.0011	-.0001	.0011	.0217
#3	.0015	.0025	6.074	.0007	.6095	.0012	-.0004	.0011	.0219

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2385.0**	**4774.0**	**37665.**	**3438.7**
Stddev	5.2	10.3	141.	19.2
%RSD	.21862	.21593	.37512	.55965
#1	2386.5	4764.2	37516.	3435.2
#2	2389.2	4784.8	37797.	3421.4
#3	2379.2	4773.1	37683.	3459.4

Zoom In Zoom Out

Sample Name: FA33866-11 Acquired: 5/13/2016 16:13:44 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0002**	**.0146**	**-.0006**	**.0251**	**-.0001**	**104.2**	**.0000**	**-.0001**	**.0002**
Stddev	.0003	.0051	.0003	.0004	.0000	.2	.000	.0001	.0002
%RSD	110.8	34.66	57.46	1.761	26.16	.1830	102.6	103.2	94.30
#1	.0005	.0092	-.0007	.0254	-.0001	104.4	.0000	-.0002	.0004
#2	.0000	.0192	-.0002	.0246	-.0002	104.1	.0000	-.0002	.0003
#3	.0001	.0154	-.0009	.0253	-.0001	104.0	.0000	.0000	.0000

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0004**	**.1353**	**3.137**	**4.807**	**.0040**	**.0363**	**17.57**	**-.0004**	**.0004**
Stddev	.0002	.0017	.017	.004	.0001	.0002	.01	.0001	.0011
%RSD	53.31	1.262	.5308	.0791	1.663	.4281	.0561	31.35	296.6
#1	.0005	.1364	3.150	4.804	.0041	.0363	17.58	-.0005	.0014
#2	.0002	.1333	3.118	4.805	.0040	.0361	17.56	-.0004	-.0007
#3	.0004	.1362	3.144	4.811	.0041	.0364	17.58	-.0003	.0004

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0006**	**.0027**	**5.288**	**.0006**	**.4608**	**.0010**	**-.0016**	**.0004**	**.0085**
Stddev	.0011	.0005	.004	.0002	.0012	.0001	.0013	.0001	.0000
%RSD	173.0	19.99	.0770	39.54	.2567	9.624	79.71	31.71	.5622
#1	-.0005	.0033	5.292	.0009	.4600	.0012	-.0009	.0004	.0085
#2	.0017	.0022	5.285	.0004	.4603	.0010	-.0032	.0003	.0086
#3	.0007	.0026	5.285	.0005	.4622	.0010	-.0009	.0006	.0085

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2442.0**	**4828.6**	**38352.**	**3462.7**
Stddev	6.2	7.2	78.	11.7
%RSD	.25477	.14969	.20214	.33915
#1	2439.7	4827.9	38307.	3455.9
#2	2449.0	4836.2	38307.	3455.8
#3	2437.2	4821.8	38441.	3476.2

Zoom In Zoom Out

Sample Name: FA33785-1 Acquired: 5/13/2016 16:18:14 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0001**	**.0206**	**.0413**	**.0026**	**-.0001**	**60.29**	**-.0001**	**-.0001**	**.0001**
Stddev	.0002	.0048	.0008	.0002	.0000	.57	.0000	.0001	.0001
%RSD	259.2	23.11	1.998	6.717	26.71	.9449	17.56	67.57	74.40
#1	.0001	.0164	.0421	.0024	-.0001	60.29	-.0001	-.0001	.0001
#2	-.0002	.0197	.0404	.0028	-.0001	59.72	-.0001	-.0002	.0000
#3	.0000	.0258	.0413	.0026	-.0002	60.86	-.0001	-.0001	.0001

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0004**	**.3340**	**2.466**	**2.134**	**.0081**	**.0037**	**11.74**	**-.0004**	**.0004**
Stddev	.0002	.0034	.030	.024	.0000	.0000	.06	.0002	.0006
%RSD	63.38	1.022	1.207	1.108	.4385	1.070	.4876	55.08	160.5
#1	.0006	.3333	2.448	2.141	.0081	.0037	11.73	-.0003	.0002
#2	.0002	.3311	2.451	2.107	.0081	.0036	11.69	-.0007	-.0001
#3	.0003	.3378	2.501	2.153	.0080	.0037	11.81	-.0003	.0010

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0004**	**-.0003**	**.7265**	**.0005**	**.2096**	**.0008**	**-.0006**	**-.0001**	**.0084**
Stddev	.0005	.0003	.0017	.0004	.0009	.0001	.0011	.0003	.0001
%RSD	133.5	129.8	.2278	82.28	.4510	17.88	182.5	333.2	.8508
#1	.0005	-.0001	.7275	.0002	.2086	.0008	.0006	-.0004	.0084
#2	.0008	-.0006	.7275	.0003	.2096	.0007	-.0008	-.0001	.0083
#3	-.0002	-.0001	.7246	.0010	.2105	.0009	-.0015	.0002	.0085

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2446.9**	**4812.2**	**38015.**	**3407.9**
Stddev	8.2	18.8	12.	56.4
%RSD	.33466	.39085	.03212	1.6544
#1	2445.7	4793.7	38002.	3429.9
#2	2439.4	4811.6	38026.	3450.0
#3	2455.7	4831.3	38017.	3343.9

Zoom In Zoom Out

Sample Name: FA33785-2 Acquired: 5/13/2016 16:22:46 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0002**	**.0338**	**.0003**	**.0007**	**-.0001**	**26.79**	**-.0001**	**-.0001**	**.0005**
Stddev	.0002	.0062	.0004	.0002	.0001	.09	.0000	.0000	.0001
%RSD	115.9	18.32	129.0	32.16	79.27	.3207	38.46	56.94	23.22
#1	-.0004	.0392	-.0001	.0007	-.0002	26.83	.0000	.0000	.0006
#2	.0000	.0271	.0004	.0005	-.0001	26.69	-.0001	-.0001	.0004
#3	-.0002	.0351	.0007	.0009	.0000	26.85	-.0001	-.0001	.0006

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0002**	**.2826**	**1.198**	**1.119**	**.0035**	**.0003**	**12.15**	**-.0004**	**.0009**
Stddev	.0001	.0060	.023	.033	.0000	.0000	.07	.0001	.0008
%RSD	48.58	2.112	1.927	2.960	.6752	7.025	.5584	20.26	89.14
#1	.0003	.2844	1.223	1.138	.0035	.0003	12.17	-.0003	.0016
#2	.0001	.2760	1.178	1.081	.0035	.0003	12.08	-.0005	.0009
#3	.0002	.2875	1.193	1.138	.0035	.0003	12.21	-.0003	.0001

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0003**	**.0009**	**.7846**	**.0005**	**.0859**	**.0006**	**-.0010**	**.0005**	**.0058**
Stddev	.0008	.0014	.0007	.0004	.0004	.0001	.0003	.0002	.0000
%RSD	242.6	145.9	.0897	85.64	.4469	10.73	33.55	34.77	.1234
#1	.0004	.0009	.7838	.0008	.0862	.0006	-.0014	.0007	.0058
#2	.0011	-.0004	.7850	.0000	.0855	.0007	-.0007	.0006	.0058
#3	-.0005	.0023	.7850	.0006	.0860	.0007	-.0009	.0003	.0058

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2559.7**	**4969.5**	**39142.**	**3490.0**
Stddev	5.6	11.0	98.	28.0
%RSD	.21984	.22085	.24933	.80241
#1	2557.2	4969.2	39217.	3519.0
#2	2555.7	4958.7	39032.	3487.9
#3	2566.1	4980.6	39177.	3463.1

Zoom In Zoom Out

Sample Name: FA33785-3 Acquired: 5/13/2016 16:27:17 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0004**	**.1065**	**.0020**	**.0014**	**-.0001**	**46.33**	**-.0001**	**.0000**	**.0003**
Stddev	.0000	.0044	.0007	.0002	.0001	.05	.0000	.0001	.0003
%RSD	8.323	4.136	37.80	11.59	58.57	.1177	39.47	2366.	94.70
#1	.0004	.1094	.0013	.0014	-.0002	46.36	-.0001	.0001	.0007
#2	.0004	.1087	.0028	.0015	-.0001	46.27	.0000	.0000	.0003
#3	.0004	.1015	.0018	.0012	.0000	46.36	-.0001	-.0001	.0001

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0002**	**.1063**	**2.824**	**1.896**	**.0227**	**.0012**	**7.977**	**-.0003**	**.0004**
Stddev	.0002	.0016	.040	.021	.0001	.0001	.017	.0002	.0007
%RSD	85.82	1.539	1.401	1.122	.5018	7.540	.2108	67.44	171.4
#1	.0005	.1046	2.863	1.883	.0227	.0011	7.988	-.0005	.0007
#2	.0001	.1078	2.823	1.920	.0226	.0013	7.985	-.0003	-.0004
#3	.0002	.1064	2.784	1.884	.0228	.0012	7.958	-.0001	.0009

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0002**	**.0015**	**2.896**	**.0005**	**.1750**	**.0021**	**-.0008**	**.0001**	**.0078**
Stddev	.0003	.0007	.002	.0001	.0007	.0001	.0005	.0003	.0000
%RSD	106.7	44.99	.0734	12.29	.4229	5.317	63.36	178.5	.1099
#1	.0000	.0019	2.897	.0004	.1758	.0020	-.0013	.0003	.0078
#2	.0003	.0019	2.893	.0005	.1748	.0020	-.0003	-.0001	.0078
#3	.0004	.0007	2.897	.0005	.1744	.0022	-.0007	.0003	.0078

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2532.9**	**4959.7**	**39095.**	**3484.2**
Stddev	5.1	6.0	192.	14.0
%RSD	.20303	.12069	.49111	.40304
#1	2535.4	4962.6	39028.	3473.0
#2	2536.4	4963.7	39312.	3500.0
#3	2527.0	4952.8	38946.	3479.6

Zoom In Zoom Out

Sample Name: FA33785-4 Acquired: 5/13/2016 16:31:48 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0001**	**.0896**	**.0005**	**.0027**	**-.0001**	**126.9**	**-.0001**	**.0002**	**.0008**
Stddev	.0001	.0049	.0008	.0001	.0000	.6	.0000	.0000	.0002
%RSD	77.15	5.414	174.0	2.718	7.975	.4591	23.47	16.13	30.52
#1	-.0002	.0911	.0014	.0028	-.0001	127.6	-.0001	.0002	.0007
#2	.0000	.0935	.0002	.0026	-.0001	126.8	-.0002	.0002	.0010
#3	-.0001	.0842	-.0002	.0028	-.0001	126.5	-.0001	.0001	.0006

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0022**	**3.917**	**3.027**	**2.851**	**.1781**	**.0001**	**41.44**	**-.0003**	**-.0001**
Stddev	.0002	.022	.013	.047	.0005	.0000	.13	.0002	.0003
%RSD	7.239	.5663	.4330	1.662	.2791	29.40	.3032	58.99	252.9
#1	.0020	3.941	3.026	2.874	.1776	.0001	41.58	-.0002	-.0001
#2	.0023	3.915	3.014	2.883	.1786	.0001	41.38	-.0003	-.0003
#3	.0023	3.897	3.040	2.797	.1780	.0001	41.35	-.0005	.0002

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0009**	**.0018**	**1.023**	**.0007**	**.5199**	**.0034**	**.0000**	**.0005**	**.0149**
Stddev	.0005	.0026	.004	.0003	.0004	.0000	.001	.0002	.0000
%RSD	55.10	144.6	.4142	42.68	.0751	1.259	2946.	42.34	.3214
#1	.0005	.0021	1.021	.0006	.5202	.0034	.0012	.0004	.0148
#2	.0007	-.0009	1.020	.0004	.5200	.0034	-.0006	.0003	.0149
#3	.0014	.0042	1.028	.0010	.5195	.0033	-.0006	.0007	.0149

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2381.6**	**4796.9**	**37721.**	**3454.0**
Stddev	.5	1.9	191.	22.6
%RSD	.02282	.04053	.50671	.65291
#1	2382.2	4798.9	37886.	3430.6
#2	2381.1	4795.0	37511.	3455.6
#3	2381.6	4796.9	37765.	3475.6

Zoom In Zoom Out

Sample Name: FA33785-5 Acquired: 5/13/2016 16:36:17 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0003**	**.0704**	**.0046**	**.0033**	**-.0001**	**98.92**	**-.0001**	**.0001**	**.0007**
Stddev	.0002	.0040	.0006	.0000	.0001	.14	.0001	.0000	.0002
%RSD	56.49	5.729	13.85	.8710	87.63	.1389	44.30	64.34	32.77
#1	.0004	.0666	.0039	.0033	.0000	99.04	-.0002	.0001	.0005
#2	.0004	.0698	.0052	.0033	-.0002	98.93	-.0001	.0000	.0009
#3	.0001	.0746	.0047	.0033	-.0001	98.77	-.0001	.0001	.0008

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0004**	**1.938**	**1.959**	**2.479**	**.0308**	**.0001**	**44.95**	**-.0003**	**.0005**
Stddev	.0002	.008	.058	.047	.0000	.0001	.07	.0002	.0002
%RSD	47.54	.4232	2.932	1.885	.1075	60.76	.1497	77.96	46.41
#1	.0002	1.941	2.014	2.426	.0308	.0002	44.93	-.0004	.0003
#2	.0005	1.944	1.966	2.511	.0308	.0001	45.03	.0000	.0003
#3	.0004	1.929	1.899	2.501	.0308	.0001	44.90	-.0004	.0007

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0002**	**.0028**	**.5531**	**.0006**	**.2561**	**.0011**	**-.0007**	**.0009**	**.0080**
Stddev	.0009	.0022	.0033	.0001	.0006	.0001	.0003	.0001	.0000
%RSD	363.6	80.63	.5911	15.74	.2217	12.23	37.36	10.58	.4035
#1	-.0005	.0013	.5493	.0006	.2565	.0009	-.0005	.0010	.0080
#2	.0012	.0017	.5551	.0007	.2564	.0012	-.0006	.0008	.0080
#3	.0000	.0053	.5549	.0005	.2555	.0010	-.0010	.0009	.0080

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2404.9**	**4820.3**	**37791.**	**3455.1**
Stddev	4.1	8.0	22.	7.0
%RSD	.17073	.16593	.05938	.20246
#1	2402.0	4821.8	37771.	3455.8
#2	2409.6	4827.5	37815.	3461.7
#3	2403.1	4811.7	37786.	3447.8

Zoom In Zoom Out

Sample Name: FA33799-1AF Acquired: 5/13/2016 16:40:46 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0039**	**.0105**	**.0003**	**.1254**	**.0000**	**36.46**	**-.0004**	**.0697**	**.0049**
Stddev	.0006	.0053	.0010	.0007	.000	.03	.0001	.0001	.0002
%RSD	15.35	50.96	286.0	.5195	155.2	.0739	35.72	.1994	3.911
#1	.0041	.0093	-.0006	.1261	.0000	36.47	-.0005	.0697	.0047
#2	.0044	.0163	.0003	.1252	.0000	36.47	-.0002	.0699	.0049
#3	.0033	.0058	.0013	.1248	.0000	36.43	-.0005	.0696	.0050

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0011**	**160.5**	**.5712**	**38.38**	**F 34.17**	**-.0014**	**34.17**	**.0004**	**-.0036**
Stddev	.0003	.3	.0155	.13	.15	.0000	.14	.0003	.0011
%RSD	27.04	.1680	2.720	.3263	.4491	3.495	.3971	89.16	31.63
#1	.0009	160.8	.5887	38.51	34.32	-.0014	34.25	.0007	-.0044
#2	.0010	160.2	.5660	38.26	34.02	-.0014	34.01	.0001	-.0041
#3	.0014	160.5	.5590	38.35	34.15	-.0013	34.24	.0003	-.0023

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0053**	**.0050**	**7.629**	**.0014**	**.2459**	**.0009**	**.0159**	**-.0210**	**.0097**
Stddev	.0004	.0009	.004	.0003	.0007	.0001	.0012	.0001	.0000
%RSD	7.645	17.08	.0498	23.40	.2897	12.29	7.730	.4752	.2887
#1	.0050	.0057	7.632	.0014	.2464	.0009	.0162	-.0211	.0097
#2	.0051	.0053	7.631	.0010	.2451	.0008	.0145	-.0211	.0098
#3	.0057	.0040	7.625	.0016	.2462	.0010	.0169	-.0209	.0097

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2452.7**	**4844.8**	**37882.**	**3424.8**
Stddev	2.4	3.4	40.	3.1
%RSD	.09597	.06975	.10617	.08941
#1	2450.6	4848.2	37922.	3421.2
#2	2452.4	4841.4	37842.	3426.7
#3	2455.3	4844.7	37881.	3426.4

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/13/2016 16:45:20 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2478	40.71	1.984	2.000	2.022	40.64	2.010	2.007	2.036
Stddev	.0003	.06	.010	.003	.002	.12	.004	.003	.003
%RSD	.1174	.1458	.5093	.1492	.0924	.2888	.2137	.1580	.1622
#1	.2481	40.64	1.973	1.998	2.021	40.65	2.005	2.003	2.039
#2	.2476	40.72	1.993	2.003	2.022	40.52	2.011	2.008	2.033
#3	.2477	40.76	1.986	1.999	2.024	40.76	2.014	2.010	2.035
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.013	41.93	40.42	40.83	2.078	2.014	40.41	2.004	1.971
Stddev	.009	.10	.06	.10	.003	.005	.08	.006	.004
%RSD	.4382	.2346	.1531	.2475	.1277	.2695	.1861	.2891	.1835
#1	2.005	41.98	40.42	40.81	2.081	2.008	40.40	1.997	1.975
#2	2.022	41.81	40.35	40.75	2.075	2.018	40.35	2.007	1.969
#3	2.010	41.98	40.48	40.94	2.078	2.017	40.50	2.007	1.968
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.986	1.983	2.065	2.023	2.030	2.071	1.978	2.014	2.008
Stddev	.008	.006	.009	.005	.003	.001	.005	.004	.005
%RSD	.4231	.3157	.4548	.2670	.1670	.0673	.2340	.1951	.2718
#1	1.977	1.976	2.055	2.017	2.027	2.072	1.975	2.018	2.005
#2	1.993	1.989	2.074	2.026	2.028	2.071	1.983	2.011	2.005
#3	1.989	1.983	2.064	2.026	2.033	2.069	1.975	2.012	2.015
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/13/2016 16:45:20 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2290.5	4874.9	38120.	3434.8
Stddev	7.9	6.5	109.	25.2
%RSD	.34321	.13246	.28481	.73285
#1	2281.6	4871.5	38042.	3422.8
#2	2293.1	4870.9	38074.	3463.7
#3	2296.7	4882.3	38244.	3417.8

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/13/2016 16:49:32 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0052	-.0001	.0001	.0001	.0072	.0000	.0001	.0001
Stddev	.0001	.0035	.0007	.0001	.0001	.0047	.0000	.0001	.0002
%RSD	42.46	67.35	1207.	95.93	139.1	65.57	91.12	72.12	328.4
#1	.0002	.0090	.0001	.0001	.0000	.0118	.0000	.0002	-.0002
#2	.0004	.0046	.0006	.0001	.0001	.0073	.0001	.0001	.0001
#3	.0002	.0021	-.0008	.0003	.0001	.0024	.0000	.0000	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0221	.0020	-.0097	.0006	F .0014	-.0672	-.0001	.0009
Stddev	.0003	.0012	.0390	.0239	.0001	.0003	.0034	.0001	.0006
%RSD	172.6	5.479	1966.	247.4	20.44	19.76	5.000	91.76	73.08
#1	-.0002	.0229	.0223	-.0242	.0007	.0017	-.0662	.0000	.0004
#2	.0004	.0207	.0266	-.0227	.0006	.0013	-.0645	-.0002	.0006
#3	.0003	.0226	-.0430	.0179	.0005	.0012	-.0710	-.0001	.0016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0017	.0007	.0014	.0002	.0001	.0010	.0007	.0000	.0004
Stddev	.0010	.0011	.0002	.0002	.0001	.0001	.0008	.0001	.0000
%RSD	56.98	160.5	18.47	120.5	38.94	9.497	114.1	4485.	6.771
#1	.0020	.0018	.0016	.0004	.0001	.0010	.0015	.0001	.0004
#2	.0025	.0006	.0013	.0001	.0001	.0011	-.0001	.0000	.0004
#3	.0006	-.0004	.0011	.0001	.0002	.0009	.0006	-.0001	.0004
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/13/2016 16:49:32 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2622.7	5023.4	39421.	3456.8
Stddev	4.0	4.1	240.	35.1
%RSD	.15122	.08102	.60893	1.0164
#1	2618.8	5024.0	39537.	3489.6
#2	2626.7	5019.1	39145.	3461.0
#3	2622.4	5027.2	39581.	3419.7

Zoom In Zoom Out

Sample Name: FA33799-2AF Acquired: 5/13/2016 16:54:05 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	**.0080**	**.0108**	**.0013**	**.1660**	**-.0001**	**60.37**	**-.0006**	**.0613**
Stddev	.0005	.0076	.0006	.0005	.0000	.17	.0001	.0001
%RSD	5.928	70.39	47.29	.3245	48.76	.2889	13.77	.2293
#1	.0075	.0154	.0016	.1657	-.0001	60.29	-.0007	.0615
#2	.0080	.0151	.0016	.1658	-.0001	60.24	-.0007	.0612
#3	.0085	.0020	.0006	.1667	.0000	60.57	-.0005	.0613

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	**.0077**	**.0011**	**118.1**	**.6586**	**46.22**	*****	**-.0011**	**40.06**
Stddev	.0001	.0003	.2	.0154	.19	-----	.0001	.08
%RSD	1.244	24.57	.1316	2.333	.4045	-----	7.769	.1969
#1	.0077	.0014	118.0	.6409	46.16	-----	-.0011	40.00
#2	.0076	.0012	118.0	.6684	46.08	-----	-.0010	40.03
#3	.0077	.0008	118.3	.6665	46.44	-----	-.0011	40.15

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	**-.0002**	**.0025**	**-.0005**	**.0326**	**5.151**	**.0013**	**.3464**	**.0012**
Stddev	.0001	.0002	.0005	.0018	.014	.0003	.0004	.0001
%RSD	52.91	5.921	108.3	5.483	.2716	26.64	.1155	5.298
#1	-.0004	.0024	-.0002	.0323	5.166	.0017	.3459	.0012
#2	-.0002	.0027	-.0011	.0310	5.139	.0010	.3465	.0011
#3	-.0001	.0025	-.0002	.0345	5.147	.0013	.3467	.0012

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0312**	F **-.0661**	**.0085**
Stddev	.0019	.0006	.0002
%RSD	6.102	.8333	1.925
#1	.0293	-.0655	.0084
#2	.0331	-.0663	.0087
#3	.0311	-.0665	.0085

Zoom In Zoom Out

Sample Name: FA33799-2AF Acquired: 5/13/2016 16:54:05 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2364.1**	**4781.4**	**37014.**	**3387.7**
Stddev	2.9	8.1	62.	13.5
%RSD	.12420	.16972	.16648	.39945
#1	2365.7	4779.1	37028.	3383.1
#2	2365.9	4790.4	37067.	3403.0
#3	2360.7	4774.7	36947.	3377.2

Zoom In Zoom Out

Sample Name: FA33799-3F Acquired: 5/13/2016 16:58:34 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0007**	**.0133**	**-.0002**	**.0744**	**-.0001**	**5.262**	**-.0001**	**.0340**	**.0006**
Stddev	.0001	.0094	.0020	.0002	.0000	.020	.0001	.0001	.0002
%RSD	12.64	70.49	1039.	.2154	85.36	.3778	41.76	.2941	34.63
#1	.0007	.0221	.0018	.0746	.0000	5.278	-.0002	.0339	.0005
#2	.0006	.0143	-.0022	.0743	.0000	5.269	-.0002	.0340	.0008
#3	.0008	.0035	-.0002	.0743	-.0001	5.240	-.0001	.0341	.0005

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0003**	**9.553**	**.8285**	**6.240**	F **5.582**	**.0001**	**25.43**	**.0025**	**.0000**
Stddev	.0002	.026	.0108	.049	.047	.0001	.09	.0001	.0004
%RSD	54.47	.2748	1.301	.7924	.8433	124.9	.3394	5.521	2187.
#1	.0003	9.575	.8402	6.283	5.529	.0001	25.50	.0027	.0004
#2	.0004	9.559	.8265	6.251	5.596	.0002	25.45	.0024	-.0004
#3	.0001	9.524	.8189	6.186	5.620	.0000	25.34	.0025	.0000

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0014**	**.0019**	**7.383**	**.0003**	**.0645**	**.0003**	**.0011**	**-.0006**	**.0151**
Stddev	.0006	.0011	.023	.0004	.0001	.0000	.0011	.0001	.0001
%RSD	45.77	59.02	.3141	122.0	.0840	15.12	99.19	11.01	.3721
#1	.0021	.0024	7.358	.0005	.0645	.0003	.0000	-.0007	.0150
#2	.0014	.0006	7.386	-.0001	.0645	.0004	.0021	-.0005	.0151
#3	.0008	.0025	7.404	.0007	.0644	.0003	.0011	-.0006	.0151

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2531.5**	**4992.1**	**39066.**	**3466.8**
Stddev	3.5	2.2	220.	36.2
%RSD	.13864	.04335	.56320	1.0430
#1	2533.9	4991.3	39303.	3452.9
#2	2527.5	4990.4	38868.	3439.7
#3	2533.2	4994.6	39027.	3507.8

Zoom In Zoom Out

Sample Name: FA33799-4F Acquired: 5/13/2016 17:03:10 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0001**	**.0056**	**-.0003**	**.1572**	**-.0001**	**10.15**	**-.0004**	**.0241**	**.0011**
Stddev	.0002	.0041	.0007	.0002	.0000	.08	.0001	.0001	.0002
%RSD	116.1	73.04	202.4	.1184	50.86	.7605	28.51	.2096	15.31
#1	.0000	.0021	-.0002	.1574	.0000	10.18	-.0004	.0241	.0011
#2	.0001	.0047	.0003	.1571	-.0001	10.21	-.0004	.0241	.0010
#3	.0003	.0102	-.0011	.1571	-.0001	10.06	-.0003	.0242	.0013

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0004**	**53.70**	**5.404**	**7.811**	**3.707**	**.0005**	**17.61**	**.0027**	**-.0021**
Stddev	.0002	.30	.070	.110	.020	.0001	.12	.0002	.0006
%RSD	52.54	.5664	1.294	1.408	.5408	10.01	.6564	8.332	27.11
#1	.0005	53.69	5.457	7.818	3.704	.0005	17.64	.0030	-.0028
#2	.0002	54.01	5.431	7.917	3.688	.0005	17.71	.0027	-.0020
#3	.0005	53.40	5.325	7.697	3.728	.0006	17.49	.0025	-.0016

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0012**	**-.0022**	**9.975**	**.0004**	**.0966**	**.0004**	**.0006**	**.0002**	**.0153**
Stddev	.0011	.0026	.013	.0002	.0003	.0000	.0008	.0001	.0000
%RSD	87.78	116.9	.1322	40.24	.3334	8.238	134.5	55.21	.2017
#1	.0024	.0004	9.978	.0005	.0969	.0005	.0011	.0002	.0153
#2	.0005	-.0048	9.960	.0005	.0965	.0005	.0009	.0001	.0152
#3	.0008	-.0024	9.986	.0002	.0963	.0004	-.0003	.0003	.0153

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2520.6**	**4978.3**	**39140.**	**3531.0**
Stddev	6.4	1.9	101.	42.5
%RSD	.25538	.03792	.25883	1.2047
#1	2514.9	4976.4	39185.	3526.2
#2	2527.6	4980.1	39211.	3491.1
#3	2519.3	4978.5	39024.	3575.7

Zoom In Zoom Out

Sample Name: MP30355-MB1 Acquired: 5/13/2016 17:07:45 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0024	-.0015	.0002	-.0001	.0183	-.0001	.0000	.0005
Stddev	.0004	.0013	.0003	.0003	.0000	.0004	.0001	.000	.0002
%RSD	230.0	55.29	21.24	115.6	35.87	2.180	105.1	592.8	44.21
#1	.0006	.0009	-.0012	.0000	-.0002	.0186	-.0001	.0001	.0002
#2	.0000	.0028	-.0019	.0005	-.0001	.0179	.0000	-.0001	.0006
#3	-.0001	.0035	-.0015	.0003	-.0001	.0185	-.0001	.0000	.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	.0367	-.0063	-.0033	.0007	.0001	-.0617	.0002	.0006
Stddev	.0002	.0018	.0164	.0071	.0000	.0001	.0055	.0002	.0006
%RSD	42.92	4.908	260.1	212.8	5.050	147.6	8.834	86.83	107.8
#1	.0005	.0361	-.0145	.0046	.0006	-.0001	-.0577	.0000	.0002
#2	.0003	.0352	-.0170	-.0090	.0007	.0002	-.0679	.0004	.0002
#3	.0008	.0387	.0126	-.0055	.0007	.0002	-.0596	.0003	.0013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0012	.0103	.0223	-.0001	.0002	-.0011	-.0001	.0007
Stddev	.0006	.0003	.0004	.0002	.0001	.0000	.0004	.0003	.0001
%RSD	167.1	20.84	3.929	.7170	73.35	26.88	33.73	428.2	11.31
#1	-.0002	.0013	.0099	.0225	-.0001	.0001	-.0016	-.0002	.0007
#2	.0003	.0014	.0102	.0222	-.0001	.0002	-.0010	-.0002	.0008
#3	.0010	.0009	.0107	.0222	.0000	.0002	-.0008	.0003	.0006
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: MP30355-MB1 Acquired: 5/13/2016 17:07:45 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2689.3	5092.8	40463.	3566.1
Stddev	10.4	22.8	281.	28.1
%RSD	.38554	.44746	.69492	.78819
#1	2692.7	5097.9	40227.	3564.8
#2	2697.6	5112.6	40775.	3538.7
#3	2677.7	5067.9	40388.	3594.8

Zoom In Zoom Out

Sample Name: MP30355-B1 Acquired: 5/13/2016 17:12:18 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0474	27.26	1.990	2.064	.0534	25.58	.0513	.5140	.2120
Stddev	.0001	.03	.004	.003	.0005	.09	.0001	.0014	.0009
%RSD	.1535	.1126	.1875	.1226	.9218	.3426	.2585	.2691	.4069
#1	.0474	27.27	1.987	2.066	.0530	25.68	.0512	.5130	.2128
#2	.0473	27.28	1.989	2.065	.0539	25.55	.0513	.5135	.2121
#3	.0473	27.23	1.995	2.061	.0532	25.52	.0514	.5156	.2111
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2671	26.19	25.16	25.22	.5462	.4902	25.26	.5206	.4872
Stddev	.0005	.04	.06	.08	.0018	.0012	.07	.0021	.0014
%RSD	.1960	.1462	.2215	.3303	.3382	.2549	.2932	.3983	.2972
#1	.2674	26.22	25.16	25.25	.5466	.4891	25.32	.5182	.4856
#2	.2674	26.20	25.22	25.12	.5478	.4900	25.29	.5219	.4878
#3	.2665	26.15	25.11	25.28	.5442	.4916	25.18	.5216	.4883
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5056	2.001	.0220	.5177	.4926	.5125	1.960	.4865	.5136
Stddev	.0010	.003	.0003	.0008	.0003	.0009	.007	.0018	.0011
%RSD	.1925	.1650	1.353	.1560	.0652	.1842	.3842	.3616	.2224
#1	.5047	1.999	.0216	.5176	.4922	.5126	1.952	.4878	.5123
#2	.5056	2.000	.0220	.5170	.4927	.5133	1.961	.4872	.5141
#3	.5066	2.005	.0222	.5186	.4928	.5115	1.967	.4845	.5144
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: MP30355-B1 Acquired: 5/13/2016 17:12:18 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2422.6	4948.6	38668.	3473.3
Stddev	8.1	9.5	188.	17.4
%RSD	.33633	.19230	.48668	.50136
#1	2431.7	4959.5	38518.	3456.6
#2	2416.1	4942.9	38607.	3471.9
#3	2420.0	4943.2	38879.	3491.3

Zoom In Zoom Out

Sample Name: MP30355-B2 Acquired: 5/13/2016 17:16:32 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0470**	**27.86**	**1.998**	**2.109**	**.0544**	**26.14**	**.0515**	**.5153**	**.2116**
Stddev	.0005	.07	.003	.006	.0005	.10	.0001	.0004	.0026
%RSD	1.032	.2370	.1677	.3097	.8775	.3837	.2751	.0709	1.236
#1	.0476	27.83	2.001	2.105	.0547	26.12	.0514	.5152	.2141
#2	.0468	27.94	1.999	2.117	.0546	26.25	.0517	.5158	.2089
#3	.0467	27.82	1.994	2.105	.0538	26.05	.0515	.5151	.2116
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2657**	**26.87**	**25.65**	**25.84**	**.5452**	**.4893**	**25.78**	**.5224**	**.4914**
Stddev	.0024	.14	.09	.01	.0044	.0009	.13	.0007	.0020
%RSD	.8893	.5386	.3610	.0303	.8096	.1817	.5179	.1393	.3989
#1	.2680	26.86	25.68	25.83	.5492	.4897	25.77	.5229	.4910
#2	.2633	27.02	25.72	25.84	.5405	.4900	25.92	.5226	.4896
#3	.2660	26.73	25.54	25.84	.5458	.4883	25.65	.5216	.4935
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5081**	**2.018**	**.0216**	**.5206**	**.5038**	**.5110**	**1.982**	**.4860**	**.5145**
Stddev	.0010	.008	.0004	.0011	.0010	.0043	.007	.0051	.0008
%RSD	.1956	.3770	1.941	.2052	.1913	.8495	.3500	1.045	.1532
#1	.5071	2.014	.0219	.5217	.5033	.5153	1.981	.4905	.5149
#2	.5082	2.027	.0211	.5196	.5049	.5066	1.976	.4805	.5151
#3	.5091	2.013	.0218	.5205	.5031	.5112	1.990	.4871	.5136
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: MP30355-B2 Acquired: 5/13/2016 17:16:32 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2425.8**	**4975.5**	**38861.**	**3432.6**
Stddev	5.0	6.2	291.	13.9
%RSD	.20634	.12377	.74946	.40489
#1	2425.2	4970.6	38599.	3418.0
#2	2431.0	4973.4	39174.	3434.3
#3	2421.1	4982.4	38810.	3445.6

Zoom In Zoom Out

Sample Name: FA33636-1 Acquired: 5/13/2016 17:20:45 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0003**	**.0190**	**-.0003**	**.0026**	**-.0001**	**.0249**	**.0003**	**.0000**	**.0011**
Stddev	.0002	.0042	.0011	.0001	.0001	.0023	.0000	.0001	.0002
%RSD	81.14	21.87	310.3	2.016	52.07	9.136	8.056	225.9	14.02
#1	.0000	.0214	.0009	.0027	.0000	.0227	.0003	.0000	.0010
#2	.0004	.0214	-.0009	.0026	-.0001	.0272	.0003	.0001	.0010
#3	.0003	.0142	-.0010	.0026	-.0002	.0247	.0003	.0000	.0013

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0160**	**.0547**	**-.0185**	**-.0056**	**.0005**	**.0075**	**-.0090**	**.0003**	**.0460**
Stddev	.0002	.0019	.0109	.0065	.0000	.0001	.0047	.0001	.0007
%RSD	1.006	3.561	58.80	115.4	6.596	1.239	52.31	48.53	1.565
#1	.0159	.0566	-.0240	-.0017	.0005	.0075	-.0127	.0001	.0452
#2	.0162	.0527	-.0060	-.0021	.0005	.0076	-.0037	.0004	.0461
#3	.0159	.0547	-.0256	-.0132	.0005	.0074	-.0106	.0003	.0466

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0023**	**.0050**	**1.298**	**.0221**	**.0001**	**.0017**	**-.0018**	**.0000**	**.0898**
Stddev	.0003	.0013	.001	.0002	.0000	.0000	.0010	.000	.0001
%RSD	15.06	25.37	.0564	1.048	45.51	1.732	51.70	371.2	.1438
#1	.0026	.0064	1.298	.0223	.0001	.0017	-.0022	.0001	.0899
#2	.0019	.0045	1.298	.0219	.0001	.0016	-.0008	.0000	.0897
#3	.0023	.0040	1.299	.0223	.0001	.0017	-.0026	-.0002	.0897

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2707.9**	**5096.5**	**40508.**	**3497.6**
Stddev	5.2	9.4	53.	26.4
%RSD	.19174	.18426	.13121	.75604
#1	2713.6	5092.6	40566.	3467.4
#2	2703.5	5089.6	40462.	3516.3
#3	2706.4	5107.2	40496.	3509.2

Zoom In Zoom Out

Sample Name: FA33636-2 Acquired: 5/13/2016 17:25:14 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0003**	**.0204**	**-.0007**	**.0011**	**-.0001**	**.2849**	**.0000**	**.0000**	**.0021**
Stddev	.0004	.0022	.0007	.0002	.0001	.0043	.000	.000	.0003
%RSD	131.3	10.69	104.3	16.16	79.60	1.493	44.32	340.0	12.13
#1	-.0001	.0180	-.0001	.0012	.0000	.2832	.0000	-.0001	.0024
#2	.0006	.0213	-.0004	.0012	-.0002	.2817	.0000	.0000	.0019
#3	.0003	.0221	-.0015	.0009	-.0001	.2897	.0000	.0001	.0020

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0046**	**.0454**	**-.0106**	**.0771**	**.0005**	**.0078**	**.0574**	**.0001**	**.0057**
Stddev	.0002	.0018	.0482	.0177	.0000	.0000	.0016	.0001	.0011
%RSD	3.954	3.880	453.8	22.98	5.958	.4460	2.869	109.5	18.55
#1	.0044	.0465	.0444	.0774	.0005	.0078	.0561	.0000	.0069
#2	.0047	.0434	-.0313	.0592	.0005	.0078	.0569	.0002	.0053
#3	.0047	.0463	-.0450	.0947	.0005	.0078	.0593	.0002	.0049

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0008**	**.0049**	**.9446**	**.0223**	**.0002**	**.0018**	**-.0034**	**-.0002**	**.2309**
Stddev	.0003	.0008	.0013	.0003	.0001	.0001	.0010	.0001	.0008
%RSD	31.79	16.27	.1345	1.544	34.78	4.504	30.55	70.16	.3314
#1	.0010	.0053	.9432	.0219	.0001	.0018	-.0045	.0000	.2315
#2	.0005	.0040	.9449	.0224	.0003	.0019	-.0026	-.0002	.2301
#3	.0009	.0055	.9457	.0226	.0003	.0017	-.0029	-.0003	.2311

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2686.5**	**5065.5**	**39823.**	**3401.2**
Stddev	6.2	3.4	103.	16.5
%RSD	.23105	.06650	.25836	.48654
#1	2680.7	5069.4	39868.	3386.5
#2	2685.9	5063.4	39705.	3397.9
#3	2693.0	5063.6	39896.	3419.1

Zoom In Zoom Out

Sample Name: FA33636-3 Acquired: 5/13/2016 17:29:46 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0000	.0261	-.0013	.0153	-.0001	.2235	.0127	.0001	.0014
Stddev	.0005	.0032	.0004	.0002	.0000	.0007	.0001	.0001	.0001
%RSD	13450.	12.46	27.90	1.410	56.24	.3246	.4013	37.89	5.168
#1	-.0001	.0271	-.0012	.0155	-.0001	.2240	.0126	.0001	.0014
#2	-.0004	.0286	-.0018	.0151	-.0001	.2237	.0127	.0002	.0013
#3	.0005	.0224	-.0010	.0153	.0000	.2226	.0127	.0002	.0015

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.1192	.1465	-.0269	.0297	.0030	.0079	.0235	.0013	.0122
Stddev	.0003	.0034	.0223	.0296	.0000	.0002	.0037	.0001	.0004
%RSD	.2752	2.355	82.88	99.69	1.611	2.064	15.70	9.693	3.638
#1	.1188	.1456	-.0437	.0637	.0030	.0079	.0268	.0012	.0124
#2	.1195	.1436	-.0016	.0097	.0030	.0080	.0242	.0015	.0126
#3	.1192	.1503	-.0353	.0157	.0030	.0077	.0195	.0014	.0117

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0021	.0051	.4483	.0234	.0007	.0024	-.0035	.0001	.1770
Stddev	.0010	.0010	.0003	.0003	.0001	.0001	.0014	.0001	.0003
%RSD	46.59	20.08	.0574	1.077	9.123	5.531	41.45	82.21	.1731
#1	.0018	.0039	.4485	.0233	.0006	.0023	-.0019	.0002	.1770
#2	.0013	.0058	.4480	.0232	.0007	.0023	-.0047	.0001	.1768
#3	.0031	.0056	.4484	.0236	.0007	.0025	-.0038	.0000	.1774

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2670.9	5009.2	39809.	3438.2
Stddev	5.5	5.3	92.	27.7
%RSD	.20434	.10487	.22991	.80501
#1	2677.0	5014.1	39909.	3438.3
#2	2669.4	5009.7	39729.	3465.9
#3	2666.3	5003.7	39790.	3410.5

Zoom In Zoom Out

Sample Name: FA33726-1 Acquired: 5/13/2016 17:34:14 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0003	.0229	-.0006	.0004	-.0001	.0434	.0020	.0000	.0030
Stddev	.0002	.0094	.0005	.0001	.0001	.0013	.0000	.0000	.0001
%RSD	53.38	41.00	76.85	15.63	45.83	3.020	1.482	177.5	2.730
#1	.0003	.0281	-.0011	.0005	-.0001	.0432	.0020	.0001	.0031
#2	.0001	.0287	-.0001	.0004	-.0001	.0448	.0020	.0000	.0030
#3	.0004	.0121	-.0006	.0004	-.0002	.0422	.0020	.0000	.0029

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0078	.0100	.0244	-.0007	.0013	.0009	.0235	.0032	.0013
Stddev	.0002	.0009	.0235	.0064	.0000	.0001	.0091	.0001	.0003
%RSD	2.338	8.607	96.07	944.0	2.790	11.51	38.73	3.807	24.51
#1	.0076	.0100	.0423	.0040	.0013	.0009	.0131	.0032	.0016
#2	.0079	.0092	.0331	.0020	.0012	.0009	.0272	.0031	.0009
#3	.0078	.0109	-.0021	-.0079	.0013	.0007	.0301	.0033	.0013

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0016	.0082	.0215	.0240	.0000	.0005	-.0049	.0001	.0232
Stddev	.0007	.0023	.0004	.0001	.0000	.0001	.0004	.0001	.0001
%RSD	45.52	28.28	1.794	.3801	59.55	15.18	7.167	155.7	.3577
#1	.0012	.0090	.0219	.0241	.0001	.0006	-.0047	-.0001	.0232
#2	.0025	.0100	.0214	.0241	.0000	.0005	-.0048	.0002	.0232
#3	.0012	.0056	.0212	.0239	.0000	.0006	-.0054	.0001	.0231

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2717.7	5076.7	39983.	3419.1
Stddev	6.1	2.7	109.	19.0
%RSD	.22367	.05309	.27142	.55633
#1	2721.9	5079.6	39870.	3421.4
#2	2720.5	5074.2	40086.	3399.0
#3	2710.7	5076.3	39992.	3436.8

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/13/2016 17:38:46 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2464	40.42	1.968	1.986	2.011	40.07	1.977	1.984	2.004
Stddev	.0011	.08	.005	.007	.002	.09	.002	.002	.008
%RSD	.4455	.1915	.2758	.3529	.1046	.2344	.0751	.1182	.3820
#1	.2469	40.35	1.974	1.981	2.009	40.05	1.976	1.984	2.002
#2	.2471	40.50	1.963	1.994	2.013	40.17	1.978	1.986	2.012
#3	.2451	40.40	1.968	1.983	2.010	39.99	1.976	1.982	1.997
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.027	41.42	39.94	40.06	2.047	1.995	40.17	1.978	1.933
Stddev	.003	.06	.14	.18	.008	.002	.09	.004	.002
%RSD	.1655	.1336	.3548	.4442	.4110	.0906	.2218	.1952	.0842
#1	2.029	41.38	39.79	40.05	2.043	1.994	40.11	1.978	1.934
#2	2.028	41.49	39.96	40.24	2.057	1.997	40.28	1.982	1.931
#3	2.023	41.40	40.07	39.88	2.041	1.996	40.14	1.974	1.934
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.985	1.981	2.071	1.996	2.019	2.050	1.955	1.991	1.961
Stddev	.004	.004	.003	.003	.004	.006	.005	.002	.002
%RSD	.2265	.2183	.1571	.1502	.1737	.3050	.2830	.0899	.0984
#1	1.988	1.985	2.068	1.995	2.016	2.047	1.961	1.990	1.961
#2	1.987	1.983	2.073	1.999	2.023	2.057	1.954	1.993	1.963
#3	1.980	1.976	2.073	1.993	2.018	2.045	1.950	1.990	1.959
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/13/2016 17:38:46 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2328.4	4919.7	38655.	3485.7
Stddev	2.6	5.2	156.	12.0
%RSD	.11160	.10526	.40287	.34498
#1	2327.7	4923.5	38615.	3486.5
#2	2331.3	4913.8	38524.	3473.2
#3	2326.3	4921.7	38827.	3497.3

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/13/2016 17:42:58 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0109**	**.0003**	**.0006**	**.0002**	**.0112**	**.0001**	**.0002**	**.0002**
Stddev	.0003	.0024	.0005	.0000	.0001	.0031	.0000	.0001	.0001
%RSD	445.4	22.33	170.2	4.849	39.63	27.92	31.52	44.50	70.87
#1	.0001	.0088	.0007	.0006	.0003	.0077	.0002	.0003	.0000
#2	.0003	.0103	.0004	.0006	.0001	.0125	.0001	.0001	.0002
#3	-.0003	.0135	-.0003	.0005	.0002	.0135	.0001	.0001	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005**	**.0242**	**-.0313**	**.0001**	**.0003**	F **.0014**	**-.0801**	**-.0001**	**.0003**
Stddev	.0001	.0011	.0162	.0107	.0000	.0004	.0044	.0002	.0002
%RSD	16.66	4.640	51.69	7896.	8.708	28.77	5.481	129.4	82.70
#1	.0005	.0236	-.0185	-.0078	.0003	.0019	-.0837	-.0001	.0000
#2	.0006	.0234	-.0259	.0123	.0003	.0014	-.0815	.0000	.0005
#3	.0004	.0254	-.0494	-.0042	.0003	.0010	-.0752	-.0003	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**.0015**	**.0038**	**.0006**	**.0003**	**.0015**	**.0003**	**.0002**	**.0005**
Stddev	.0005	.0011	.0002	.0002	.0001	.0001	.0003	.0003	.0001
%RSD	124.4	71.13	4.725	39.45	42.62	5.792	94.58	129.0	24.74
#1	.0010	.0019	.0040	.0008	.0004	.0016	.0001	.0006	.0005
#2	.0000	.0024	.0038	.0004	.0001	.0015	.0001	.0000	.0006
#3	.0003	.0003	.0037	.0006	.0004	.0014	.0006	.0001	.0004
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/13/2016 17:42:58 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2669.2**	**5112.5**	**40195.**	**3522.8**
Stddev	5.0	.7	195.	19.8
%RSD	.18692	.01335	.48467	.56225
#1	2667.7	5112.5	40096.	3531.8
#2	2674.7	5111.8	40071.	3536.5
#3	2665.1	5113.2	40420.	3500.1

Zoom In Zoom Out

Sample Name: FA33726-4 Acquired: 5/13/2016 17:47:30 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0005**	**.0357**	**-.0012**	**.0051**	**-.0001**	**.0740**	**.0950**	**.0005**	**.0114**
Stddev	.0002	.0080	.0005	.0002	.0001	.0025	.0000	.0002	.0003
%RSD	41.77	22.39	37.65	4.762	83.86	3.357	.0244	38.10	2.420
#1	.0005	.0436	-.0007	.0050	.0000	.0767	.0950	.0003	.0111
#2	.0003	.0277	-.0016	.0054	-.0001	.0735	.0949	.0004	.0114
#3	.0007	.0358	-.0013	.0050	.0000	.0718	.0950	.0007	.0117

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0329**	**4.346**	**.0568**	**-.0092**	**.0228**	**.0071**	**.0161**	**.0190**	**.3853**
Stddev	.0005	.010	.0056	.0129	.0001	.0001	.0053	.0001	.0004
%RSD	1.384	.2221	9.867	140.3	.5776	1.950	32.84	.2895	.1163
#1	.0329	4.352	.0543	-.0196	.0226	.0072	.0189	.0189	.3856
#2	.0333	4.335	.0632	.0052	.0227	.0072	.0194	.0190	.3848
#3	.0324	4.351	.0528	-.0132	.0229	.0070	.0100	.0191	.3854

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0037**	**.0046**	**.0923**	**.0250**	**.0005**	**.0090**	**-.0035**	**.0005**	**.4669**
Stddev	.0008	.0011	.0004	.0001	.0001	.0000	.0008	.0002	.0008
%RSD	21.38	23.06	.3817	.4460	13.37	.3576	22.09	35.05	.1806
#1	.0042	.0058	.0921	.0250	.0005	.0091	-.0038	.0007	.4673
#2	.0028	.0039	.0927	.0250	.0006	.0091	-.0026	.0004	.4659
#3	.0041	.0041	.0921	.0248	.0006	.0090	-.0040	.0004	.4675

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2694.3**	**5072.3**	**40000.**	**3462.8**
Stddev	4.6	6.7	172.	7.6
%RSD	.17155	.13240	.42981	.22070
#1	2690.2	5066.2	40193.	3471.4
#2	2699.3	5079.5	39947.	3460.3
#3	2693.3	5071.2	39862.	3456.7

Zoom In Zoom Out

Sample Name: FA33726-8 Acquired: 5/13/2016 17:51:56 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.1058**	**.1059**	**-.0011**	**.0033**	**-.0001**	**.0570**	**.0033**	**.0001**	**.1430**
Stddev	.0006	.0056	.0008	.0003	.0000	.0011	.0001	.0000	.0004
%RSD	.5719	5.294	73.99	8.806	41.34	1.966	1.933	22.38	.2462
#1	.1064	.1050	-.0004	.0035	-.0001	.0581	.0032	.0001	.1431
#2	.1057	.1008	-.0020	.0030	-.0001	.0559	.0034	.0001	.1433
#3	.1052	.1119	-.0010	.0035	-.0001	.0571	.0033	.0001	.1426

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0873**	**.7151**	**.0288**	**.0433**	**.0082**	**.0388**	**.0996**	**.0818**	**.0626**
Stddev	.0003	.0011	.0125	.0122	.0000	.0001	.0087	.0003	.0003
%RSD	.3904	.1528	43.48	28.14	.5178	.2166	8.729	.3162	.4249
#1	.0875	.7161	.0423	.0296	.0082	.0388	.1062	.0815	.0629
#2	.0874	.7139	.0264	.0530	.0082	.0387	.0897	.0818	.0624
#3	.0869	.7152	.0176	.0472	.0082	.0388	.1029	.0821	.0626

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0017**	**.0110**	**.1063**	**.1614**	**.0001**	**.0873**	**-.0073**	**.0034**	**.0840**
Stddev	.0003	.0017	.0003	.0011	.0000	.0001	.0014	.0002	.0004
%RSD	19.73	15.07	.2538	.6572	74.87	.1210	18.92	4.977	.4344
#1	.0013	.0119	.1063	.1624	.0000	.0872	-.0074	.0034	.0835
#2	.0020	.0091	.1061	.1617	.0000	.0873	-.0087	.0036	.0842
#3	.0017	.0121	.1066	.1603	.0001	.0874	-.0059	.0032	.0841

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2722.8**	**5038.7**	**39804.**	**3431.6**
Stddev	2.8	12.1	83.	6.9
%RSD	.10446	.24073	.20810	.20071
#1	2726.1	5049.5	39712.	3425.1
#2	2721.2	5025.6	39826.	3438.8
#3	2721.1	5041.1	39873.	3430.8

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/13/2016 17:56:20 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0091	.2225	.0098	.2085	.0052	1.061	.0053	.0542	.0107
Stddev	.0004	.0019	.0010	.0020	.0000	.004	.0001	.0001	.0001
%RSD	4.385	.8516	10.51	.9433	.5654	.4200	1.056	.2149	.6690
#1	.0092	.2204	.0108	.2069	.0052	1.064	.0053	.0542	.0106
#2	.0086	.2242	.0087	.2107	.0052	1.061	.0054	.0541	.0107
#3	.0093	.2228	.0099	.2080	.0053	1.056	.0053	.0544	.0107

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0282	.3138	10.28	5.270	.0167	.0500	10.38	.0432	.0056
Stddev	.0001	.0012	.04	.007	.0000	.0002	.02	.0002	.0004
%RSD	.3681	.3859	.3848	.1251	.2900	.3312	.1689	.5651	7.203
#1	.0283	.3125	10.32	5.277	.0167	.0501	10.36	.0434	.0056
#2	.0282	.3149	10.27	5.264	.0167	.0498	10.40	.0433	.0052
#3	.0281	.3140	10.25	5.270	.0166	.0499	10.38	.0429	.0060

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0069	.0112	.0527	.0534	.0104	.0106	.0099	.0490	.0211
Stddev	.0002	.0008	.0004	.0001	.0001	.0001	.0009	.0005	.0000
%RSD	2.491	7.220	.7317	.1542	1.277	.8567	8.967	1.027	.0976
#1	.0070	.0103	.0531	.0534	.0104	.0106	.0108	.0487	.0211
#2	.0069	.0115	.0528	.0533	.0105	.0105	.0096	.0487	.0211
#3	.0067	.0118	.0523	.0534	.0102	.0107	.0091	.0495	.0212

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2576.2	5011.6	39691.	3521.6
Stddev	1.9	11.9	58.	33.3
%RSD	.07564	.23808	.14575	.94622
#1	2578.3	5024.6	39756.	3488.9
#2	2574.5	5001.0	39645.	3520.4
#3	2575.7	5009.3	39672.	3555.5

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/13/2016 18:00:47 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0004	F 518.3	.0018	-.0003	-.0002	493.7	.0001	-.0001	-.0001
Stddev	.0002	7.5	.0013	.0004	.0000	1.6	.0001	.0002	.0001
%RSD	53.99	1.440	74.79	159.4	10.13	.3273	164.2	141.6	153.9
#1	.0004	514.2	.0003	.0002	-.0002	493.2	.0001	-.0001	.0000
#2	.0002	513.7	.0029	-.0006	-.0002	492.4	.0002	-.0003	.0000
#3	.0007	526.9	.0022	-.0005	-.0002	495.5	.0000	.0000	-.0002

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0003	185.0	.0615	F 532.7	-.0005	.0000	.2044	-.0009	-.0020
Stddev	.0001	1.2	.0138	5.5	.0000	.001	.0143	.0004	.0032
%RSD	17.10	.6257	22.48	1.032	4.130	3322.	6.995	43.63	160.3
#1	-.0004	184.2	.0747	529.3	-.0005	-.0004	.1962	-.0008	-.0036
#2	-.0003	184.4	.0472	529.8	-.0006	.0005	.1961	-.0013	.0017
#3	-.0003	186.3	.0626	539.0	-.0005	.0000	.2209	-.0006	-.0042

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0009	-.0051	.0111	.0012	.0003	.0006	-.0006	.0004	-.0036
Stddev	.0017	.0032	.0012	.0003	.0001	.0001	.0005	.0001	.0001
%RSD	178.1	63.31	10.84	22.75	25.72	12.18	92.02	33.16	1.453
#1	-.0028	-.0083	.0121	.0014	.0002	.0005	-.0001	.0003	-.0037
#2	.0004	-.0018	.0114	.0009	.0003	.0006	-.0011	.0005	-.0036
#3	-.0005	-.0052	.0098	.0013	.0003	.0005	-.0005	.0005	-.0036

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2032.0	4521.7	34313.	3259.2
Stddev	14.9	27.4	142.	36.3
%RSD	.73168	.60553	.41437	1.1127
#1	2024.3	4507.5	34372.	3262.6
#2	2022.5	4504.3	34151.	3293.6
#3	2049.1	4553.2	34416.	3221.3

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 5/13/2016 18:05:25 Type: Unk
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	F 1.041	F 520.6	1.078	.5273	.5162	488.7	.9464	.4750	.5119
Stddev	.007	5.5	.005	.0016	.0007	2.3	.0020	.0006	.0028
%RSD	.6297	1.052	.4772	.3032	.1415	.4699	.2082	.1345	.5485
#1	1.037	520.4	1.072	.5282	.5170	487.3	.9462	.4744	.5086
#2	1.049	515.2	1.082	.5254	.5158	491.4	.9445	.4749	.5133
#3	1.038	526.2	1.080	.5283	.5158	487.5	.9484	.4757	.5137

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.5604	184.0	.0586	F 523.0	.5124	.9343	.2240	.9473	.9542
Stddev	.0024	.3	.0288	1.1	.0031	.0025	.0077	.0008	.0034
%RSD	.4304	.1562	49.05	.2050	.6089	.2677	3.434	.0851	.3598
#1	.5582	184.2	.0261	522.8	.5093	.9326	.2234	.9472	.9533
#2	.5630	184.1	.0806	524.1	.5155	.9332	.2167	.9466	.9513
#3	.5600	183.7	.0692	522.0	.5122	.9372	.2320	.9482	.9580

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.028	1.019	.1412	.9140	1.032	1.007	.9444	.4631	.9369
Stddev	.001	.006	.0003	.0011	.002	.005	.0083	.0023	.0004
%RSD	.1224	.5649	.2065	.1244	.2033	.5008	.8826	.4950	.0455
#1	1.027	1.019	.1409	.9134	1.034	1.003	.9477	.4614	.9365
#2	1.028	1.025	.1414	.9133	1.031	1.013	.9350	.4657	.9368
#3	1.029	1.013	.1414	.9153	1.030	1.006	.9507	.4623	.9374

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2018.6	4531.3	34952.	3290.0
Stddev	4.6	8.6	228.	8.7
%RSD	.22903	.18932	.65306	.26588
#1	2020.4	4541.1	35102.	3281.8
#2	2022.2	4528.0	34689.	3288.9
#3	2013.4	4524.9	35064.	3299.2

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/13/2016 18:09:54 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2469	40.32	1.971	1.980	2.006	40.08	1.983	1.988	2.007
Stddev	.0013	.47	.008	.014	.022	.42	.006	.004	.008
%RSD	.5243	1.177	.3891	.7150	1.099	1.039	.3032	.2282	.3980
#1	.2461	40.29	1.979	1.985	2.004	40.18	1.989	1.993	1.998
#2	.2461	40.81	1.971	1.991	2.029	40.43	1.983	1.988	2.011
#3	.2483	39.87	1.964	1.964	1.985	39.62	1.977	1.984	2.012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.020	41.42	39.82	40.12	2.049	1.997	39.95	1.982	1.944
Stddev	.003	.46	.31	.65	.005	.004	.38	.006	.004
%RSD	.1267	1.113	.7788	1.630	.2238	.1783	.9555	.3148	.1967
#1	2.022	41.35	39.77	40.08	2.044	2.000	39.89	1.989	1.946
#2	2.018	41.92	40.15	40.80	2.050	1.998	40.35	1.981	1.947
#3	2.018	41.01	39.54	39.49	2.053	1.994	39.60	1.977	1.940
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.987	1.980	2.055	1.999	2.012	2.049	1.967	1.992	1.967
Stddev	.009	.003	.007	.002	.017	.005	.008	.004	.009
%RSD	.4332	.1671	.3616	.1008	.8569	.2252	.4201	.1885	.4780
#1	1.996	1.983	2.064	2.001	2.008	2.044	1.960	1.989	1.977
#2	1.986	1.978	2.052	1.999	2.031	2.049	1.976	1.990	1.967
#3	1.979	1.978	2.049	1.997	1.997	2.053	1.964	1.996	1.958
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

SGS ACCUTEST FA33720

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/13/2016 18:09:54 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2309.0**	**4900.2**	**38374.**	**3474.2**
Stddev	5.6	17.0	293.	51.4
%RSD	.24348	.34682	.76348	1.4790
#1	2303.5	4881.0	38711.	3497.8
#2	2308.8	4906.6	38226.	3415.3
#3	2314.7	4913.1	38185.	3509.5

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/13/2016 18:14:06 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**.0237**	**-.0001**	**.0003**	**.0002**	**.0182**	**.0001**	**.0001**	**.0001**
Stddev	.000	.0018	.0009	.0001	.0001	.0017	.0001	.0000	.0001
%RSD	502.3	7.692	665.4	35.05	52.21	9.259	53.03	34.47	94.57
#1	.0000	.0220	.0006	.0004	.0003	.0178	.0002	.0001	.0002
#2	.0001	.0256	.0002	.0004	.0002	.0200	.0001	.0001	.0000
#3	-.0002	.0235	-.0012	.0002	.0001	.0167	.0001	.0001	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0296**	**-.0347**	**.0146**	**.0002**	F **.0016**	**-.0471**	**-.0001**	**.0007**
Stddev	.0001	.0040	.0370	.0209	.0000	.0002	.0051	.0000	.0004
%RSD	42.56	13.39	106.7	143.1	16.31	14.48	10.82	38.63	64.74
#1	.0004	.0337	.0079	-.0023	.0003	.0017	-.0436	-.0001	.0009
#2	.0002	.0293	-.0592	.0081	.0002	.0016	-.0529	-.0001	.0002
#3	.0004	.0258	-.0527	.0380	.0002	.0013	-.0447	-.0002	.0010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0019**	**.0012**	**.0010**	**.0004**	**.0003**	**.0012**	**.0006**	**.0003**	**.0004**
Stddev	.0001	.0008	.0001	.0002	.0001	.0002	.0011	.0002	.0000
%RSD	6.136	68.50	10.88	58.11	36.52	13.94	174.6	62.19	9.537
#1	.0018	.0013	.0009	.0004	.0002	.0014	-.0006	.0001	.0004
#2	.0020	.0003	.0011	.0007	.0002	.0012	.0012	.0004	.0005
#3	.0020	.0019	.0010	.0002	.0004	.0011	.0012	.0003	.0004
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/13/2016 18:14:06 Type: QC
Method: 60102007_042011(v108) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2664.3**	**5096.2**	**40272.**	**3539.8**
Stddev	4.7	4.5	150.	17.7
%RSD	.17669	.08928	.37232	.50108
#1	2665.1	5096.5	40144.	3519.8
#2	2668.5	5100.6	40235.	3553.5
#3	2659.2	5091.5	40437.	3546.1

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Ag 328.068 {103}	☒	2	V	-0.005817	0.000000	No
			Fe	0.000003	0.000000	No
Al 396.152 { 85}	☒	1	Mo	0.040330	0.000000	No
As 189.042 {478}	☒	4	Fe	-0.000077	0.000000	No
			Cr	-0.000653	0.000000	No
			Mo	0.000444	0.000000	No
			Al	0.000001	0.000000	No
Ba 455.403 { 74}	☒	1	Fe	0.000008	0.000000	No
Be 313.042 {108}	☒	2	V	0.000625	0.000000	No
			Ti	-0.000289	0.000000	No
Ca 317.933 {106}	☒	None				
Cd 226.502 {449}	☒	4	Fe	0.000095	0.000000	No
			Ca	-0.000000	0.000000	No
			Al	-0.000002	0.000000	No
			Ti	0.000103	0.000000	No
Co 228.616 {447}	☒	3	Mo	-0.001220	0.000000	No
			Ti	0.002210	0.000000	No
			Fe	0.000000	0.000000	No
Cr 267.716 {126}	☒	4	Al	0.000005	0.000000	No
			Fe	-0.000020	0.000000	No
			Ca	0.000002	0.000000	No
			Cd	-0.000120	0.000000	No
Cu 324.754 {104}	☒	10	Mo	0.000189	0.000000	No
			Sn	-0.000012	0.000000	No
			V	-0.000158	0.000000	No
			Al	0.000003	0.000000	No
			Mg	0.000003	0.000000	No
			Co	-0.000547	0.000000	No
			Cd	0.000190	0.000000	No
			Fe	-0.000114	0.000000	No
			Ca	0.000001	0.000000	No
			Ti	-0.000268	0.000000	No
Fe 259.940 {130}	☒	None				
In 230.606 {446}*	☒	None				
K 766.490 { 44}	☒	None				
Mg 279.079 {121}	☒	None				
Mn 257.610 {131}	☒	2	Fe	0.000008	0.000000	No
			Mg	0.000000	0.000000	No
Mo 202.030 {467}	☒	1	Fe	-0.000010	0.000000	No
Na 589.592 { 57}	☒	None				
Ni 231.604 {445}	☒	7	Fe	-0.000041	0.000000	No
			Co	0.000112	0.000000	No
			Mo	0.000980	0.000000	No
			Sb	-0.000120	0.000000	No
			Al	0.000003	0.000000	No
			Be	-0.000304	0.000000	No
			Tl	0.000172	0.000000	No
Pb 220.353 {453}	☒	8	Al	0.000178	0.000000	No
			Fe	0.000075	0.000000	No
			Mo	-0.002189	0.000000	No
			Cu	0.000467	0.000000	No
			Ti	0.000036	0.000000	No
			Si	0.000232	0.000000	No
			Ca	-0.000005	0.000000	No
			Cr	-0.000260	0.000000	No
Sb 206.833 {463}	☒	11	Fe	0.000027	0.000000	No
			Cr	0.011486	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
			Mo	-0.003944	0.000000	No
			V	-0.000441	0.000000	No
			Sn	-0.008695	0.000000	No
			Ti	0.000278	0.000000	No
			Ca	0.000001	0.000000	No
			Ni	-0.000818	0.000000	No
			Al	0.000010	0.000000	No
			Mn	-0.000133	0.000000	No
			Mg	-0.000002	0.000000	No
Se 196.090 {472}	☒	12	Fe	0.000017	0.000000	No
			Ca	-0.000003	0.000000	No
			Mn	0.000331	0.000000	No
			Mo	0.000111	0.000000	No
			Al	-0.000035	0.000000	No
			V	0.000000	0.000000	No
			Zn	0.000000	0.000000	No
			Sr	-0.000111	0.000000	No
			As	0.000125	0.000000	No
			Cd	-0.000250	0.000000	No
			Mg	-0.000004	0.000000	No
			Cr	-0.000326	0.000000	No
Si 212.412 {459}	☒	1	Mo	0.000000	0.000000	No
Sn 189.989 {477}	☒	None				
Sr 407.771 { 83}	☒	1	Ca	0.000013	0.000000	No
Ti 334.941 {101}	☒	1	Ca	-0.000011	0.000000	No
Tl 190.856 {477}	☒	10	Co	0.004099	0.000000	No
			Fe	-0.000018	0.000000	No
			Al	-0.000005	0.000000	No
			Ba	-0.000051	0.000000	No
			Ti	-0.000648	0.000000	No
			Sb	0.000167	0.000000	No
			Ca	-0.000004	0.000000	No
			Cr	0.000340	0.000000	No
			Mg	-0.000002	0.000000	No
			V	0.000015	0.000000	No
V 292.402 {115}	☒	5	Fe	0.000013	0.000000	No
			Cr	-0.003634	0.000000	No
			Mo	-0.009536	0.000000	No
			Ti	0.000303	0.000000	No
			Mn	-0.000333	0.000000	No
Y 224.306 {450}*	☒	None				
Y 360.073 { 94}*	☒	None				
Y 371.030 { 91}*	☒	None				
Zn 206.200 {463}	☒	5	Cr	-0.001305	0.000000	No
			Al	0.000011	0.000000	No
			Ca	0.000003	0.000000	No
			Fe	-0.000010	0.000000	No
			As	0.001105	0.000000	No

Element, Wavelength and Order	Date of Fit	Date of Cal.	Type of Fit	Weighting	A0	A1	A2	n (Exponent)
Ag 328.068 {103}	5/17/2016 7:10:08	5/16/2016 10:37:19	Linear	1/Conc	-0.000380	0.586507	0.000000	1.000000
Al 396.152 { 85}	5/17/2016 7:10:08	5/16/2016 10:37:19	Linear	1/Conc	0.000663	0.220718	0.000000	1.000000
As 189.042 {478}	5/17/2016 7:10:08	5/16/2016 10:37:19	Linear	1/Conc	-0.000783	0.175511	0.000000	1.000000
Ba 455.403 { 74}	5/17/2016 7:10:08	5/16/2016 10:37:19	Linear	1/Conc	0.005795	8.949706	0.000000	1.000000
Be 313.042 {108}	5/17/2016 7:10:08	5/16/2016 10:37:19	Linear	1/Conc	0.003692	10.633568	0.000000	1.000000
Ca 317.933 {106}	5/17/2016 7:10:08	5/16/2016 10:37:19	Linear	1/Conc	0.006993	0.223622	0.000000	1.000000
Cd 226.502 {449}	5/17/2016 7:10:08	5/16/2016 10:37:19	Linear	1/Conc	-0.000378	4.491279	0.000000	1.000000
Co 228.616 {447}	5/17/2016 7:10:08	5/16/2016 10:37:19	Linear	1/Conc	-0.000207	2.511446	0.000000	1.000000
Cr 267.716 {126}	5/17/2016 7:10:08	5/16/2016 10:37:19	Linear	1/Conc	-0.000050	0.497801	0.000000	1.000000
Cu 324.754 {104}	5/17/2016 7:10:08	5/16/2016 10:37:19	Linear	1/Conc	0.007380	0.926330	0.000000	1.000000
Fe 259.940 {130}	5/17/2016 7:10:08	5/16/2016 10:37:19	Linear	1/Conc	0.003152	0.155616	0.000000	1.000000
In 230.606 {446}*	5/17/2016 7:10:08	5/5/2010 12:30:54	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
K 766.490 { 44}	5/17/2016 7:10:08	5/16/2016 10:37:19	Linear	1/Conc	-0.004513	0.097284	0.000000	1.000000
Mg 279.079 {121}	5/17/2016 7:10:08	5/16/2016 10:37:19	Linear	1/Conc	-0.000330	0.023209	0.000000	1.000000
Mn 257.610 {131}	5/17/2016 7:10:08	5/16/2016 10:37:19	Linear	1/Conc	0.001544	2.732349	0.000000	1.000000
Mo 202.030 {467}	5/17/2016 7:10:08	5/16/2016 10:37:19	Linear	1/Conc	0.002381	1.114652	0.000000	1.000000
Na 589.592 { 57}	5/17/2016 7:10:08	5/16/2016 10:37:19	Linear	1/Conc	-0.003861	0.419946	0.000000	1.000000
Ni 231.604 {445}	5/17/2016 7:10:08	5/16/2016 10:37:19	Linear	1/Conc	-0.000441	1.493873	0.000000	1.000000
Pb 220.353 {453}	5/17/2016 7:10:08	5/16/2016 10:37:19	Linear	1/Conc	0.000439	0.769949	0.000000	1.000000
Sb 206.833 {463}	5/17/2016 7:10:08	5/16/2016 10:37:19	Linear	1/Conc	0.001198	0.256066	0.000000	1.000000
Se 196.090 {472}	5/17/2016 7:10:08	5/16/2016 10:37:19	Linear	1/Conc	-0.000023	0.125632	0.000000	1.000000
Si 212.412 {459}	5/17/2016 7:10:08	5/16/2016 10:37:19	Linear	1/Conc	0.004995	0.416349	0.000000	1.000000
Sn 189.989 {477}	5/17/2016 7:10:08	5/16/2016 10:37:19	Linear	1/Conc	0.000725	0.383523	0.000000	1.000000
Sr 407.771 { 83}	5/17/2016 7:10:08	5/16/2016 10:37:19	Linear	1/Conc	0.006759	16.101986	0.000000	1.000000
Ti 334.941 {101}	5/17/2016 7:10:08	5/16/2016 10:37:19	Linear	1/Conc	0.003340	2.002717	0.000000	1.000000
Tl 190.856 {477}	5/17/2016 7:10:08	5/16/2016 10:37:19	Linear	1/Conc	-0.001759	0.276430	0.000000	1.000000
V 292.402 {115}	5/17/2016 7:10:08	5/16/2016 10:37:19	Linear	1/Conc	-0.000459	0.688896	0.000000	1.000000
Y 224.306 {450}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 360.073 { 94}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 371.030 { 91}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Zn 206.200 {463}	5/17/2016 7:10:08	5/16/2016 10:37:19	Linear	1/Conc	0.000694	2.097444	0.000000	1.000000

	Element, Wavelength and Order	Correlation	Std Error of Est	Predicted MDL	Predicted MQL	Status	Reslope		QC Norm	
							Slope	Y-int	Slope factor	Offset
	Ag 328.068 {103}	0.999855	0.000096	0.000340	0.001133	OK.	1.000000	0.000000	1	0
	Al 396.152 { 85}	0.999892	0.005244	0.008156	0.027186	OK.	1.000000	0.000000	1	0
	As 189.042 {478}	0.999971	0.000108	0.000844	0.002814	OK.	1.000000	0.000000	1	0
	Ba 455.403 { 74}	0.999969	0.005647	0.000256	0.000855	OK.	1.000000	0.000000	1	0
	Be 313.042 {108}	0.999932	0.009967	0.000069	0.000229	OK.	1.000000	0.000000	1	0
	Ca 317.933 {106}	0.999908	0.004892	0.003725	0.012415	OK.	1.000000	0.000000	1	0
	Cd 226.502 {449}	0.999905	0.004997	0.000051	0.000170	OK.	1.000000	0.000000	1	0
	Co 228.616 {447}	0.999889	0.003015	0.000102	0.000338	OK.	1.000000	0.000000	1	0
	Cr 267.716 {126}	0.999801	0.000799	0.000251	0.000836	OK.	1.000000	0.000000	1	0
	Cu 324.754 {104}	0.999867	0.001211	0.000201	0.000669	OK.	1.000000	0.000000	1	0
	Fe 259.940 {130}	0.999133	0.010444	0.002779	0.009262	OK.	1.000000	0.000000	1	0
	In 230.606 {446}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	K 766.490 { 44}	0.999878	0.002446	0.032460	0.108201	OK.	1.000000	0.000000	1	0
	Mg 279.079 {121}	0.999922	0.000466	0.023640	0.078800	OK.	1.000000	0.000000	1	0
	Mn 257.610 {131}	0.999547	0.006626	0.000041	0.000135	OK.	1.000000	0.000000	1	0
	Mo 202.030 {467}	0.999895	0.001299	0.000134	0.000445	OK.	1.000000	0.000000	1	0
	Na 589.592 { 57}	0.999867	0.011048	0.007854	0.026179	OK.	1.000000	0.000000	1	0
	Ni 231.604 {445}	0.999885	0.001822	0.000174	0.000581	OK.	1.000000	0.000000	1	0
	Pb 220.353 {453}	0.999939	0.000684	0.000623	0.002077	OK.	1.000000	0.000000	1	0
	Sb 206.833 {463}	0.999987	0.000104	0.000921	0.003070	OK.	1.000000	0.000000	1	0
	Se 196.090 {472}	0.999971	0.000078	0.001698	0.005659	OK.	1.000000	0.000000	1	0
	Si 212.412 {459}	0.999532	0.001026	0.000403	0.001343	OK.	1.000000	0.000000	1	0
	Sn 189.989 {477}	0.999682	0.000779	0.000327	0.001091	OK.	1.000000	0.000000	1	0
	Sr 407.771 { 83}	0.999869	0.020984	0.000090	0.000301	OK.	1.000000	0.000000	1	0
	Ti 334.941 {101}	0.999638	0.004340	0.000095	0.000316	OK.	1.000000	0.000000	1	0
	Tl 190.856 {477}	0.999956	0.000209	0.001035	0.003450	OK.	1.000000	0.000000	1	0
	V 292.402 {115}	0.999861	0.000913	0.000229	0.000765	OK.	1.000000	0.000000	1	0
	Y 224.306 {450}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Y 360.073 { 94}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Y 371.030 { 91}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Zn 206.200 {463}	0.999904	0.002345	0.000082	0.000273	OK.	1.000000	0.000000	1	0

Zoom In ▶ Zoom Out

Sample Name: Blank Acquired: 5/16/2016 10:22:05 Type: Cal
Method: 60102007_042011(v113) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.0004**	**.0007**	**-.0008**	**.0058**	**.0036**	**.0070**	**-.0004**	**-.0002**	**-.0001**
Stddev	.0002	.0009	.0001	.0023	.0009	.0001	.0005	.0003	.0000
%RSD	52.45	122.9	15.27	40.32	24.37	.9423	122.1	126.9	46.74
#1	-.0002	.0006	-.0009	.0083	.0044	.0070	.0000	.0001	-.0001
#2	-.0006	.0016	-.0008	.0055	.0038	.0071	-.0003	-.0003	.0000
#3	-.0003	-.0001	-.0006	.0037	.0027	.0070	-.0010	-.0005	-.0001

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0074**	**.0030**	**-.0045**	**-.0003**	**.0015**	**.0024**	**-.0037**	**-.0005**	**.0005**
Stddev	.0001	.0013	.0036	.0007	.0002	.0003	.0029	.0003	.0001
%RSD	1.895	41.31	80.90	224.3	15.35	10.83	77.63	66.51	23.65
#1	.0075	.0044	-.0061	-.0005	.0015	.0026	-.0008	-.0001	.0006
#2	.0073	.0020	-.0070	-.0010	.0017	.0024	-.0037	-.0005	.0005
#3	.0073	.0027	-.0003	.0005	.0012	.0021	-.0066	-.0007	.0003

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0012**	**.0000**	**.0050**	**.0007**	**.0065**	**.0033**	**-.0018**	**-.0005**	**.0007**
Stddev	.0003	.000	.0001	.0000	.0014	.0002	.0001	.0002	.0002
%RSD	23.06	450.3	1.938	4.106	21.61	5.611	7.920	48.02	32.86
#1	.0011	-.0001	.0049	.0007	.0081	.0034	-.0019	-.0005	.0009
#2	.0010	.0000	.0050	.0007	.0057	.0034	-.0018	-.0002	.0006
#3	.0015	.0001	.0051	.0007	.0057	.0031	-.0016	-.0007	.0005

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2665.7**	**4775.2**	**40652.**	**3881.4**
Stddev	15.6	34.5	270.	14.8
%RSD	.58612	.72267	.66349	.38185
#1	2680.4	4802.9	40341.	3881.0
#2	2667.5	4786.1	40802.	3866.8
#3	2649.3	4736.5	40813.	3896.5

Zoom In ▶ Zoom Out

Sample Name: LowStd Acquired: 5/16/2016 10:26:14 Type: Cal
Method: 60102007_042011(v113) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0361**	**2.129**	**.0846**	**4.429**	**5.321**	**2.189**	**2.273**	**1.285**	**.2566**
Stddev	.0000	.004	.0002	.012	.022	.013	.004	.002	.0008
%RSD	.0752	.1723	.2597	.2739	.4217	.5830	.1569	.1821	.3110
#1	.0361	2.133	.0844	4.443	5.342	2.192	2.271	1.284	.2566
#2	.0361	2.130	.0846	4.422	5.323	2.201	2.271	1.284	.2557
#3	.0361	2.126	.0848	4.421	5.297	2.176	2.277	1.288	.2573

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.4775**	**1.659**	**.9234**	**.2234**	**1.420**	**.5695**	**3.988**	**.7663**	**.3720**
Stddev	.0004	.003	.0054	.0010	.005	.0015	.013	.0022	.0008
%RSD	.0893	.1668	.5898	.4565	.3817	.2669	.3142	.2900	.2108
#1	.4770	1.658	.9209	.2241	1.420	.5687	4.002	.7645	.3728
#2	.4776	1.662	.9296	.2238	1.414	.5684	3.980	.7656	.3717
#3	.4779	1.657	.9196	.2222	1.425	.5712	3.981	.7688	.3714

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.1272**	**.0614**	**.2059**	**.2011**	**8.255**	**1.040**	**.1372**	**.3476**	**1.062**
Stddev	.0004	.0005	.0004	.0005	.016	.001	.0009	.0002	.001
%RSD	.2935	.8683	.2027	.2429	.1946	.0973	.6457	.0597	.0820
#1	.1273	.0610	.2054	.2007	8.248	1.039	.1371	.3475	1.061
#2	.1268	.0612	.2062	.2010	8.274	1.040	.1381	.3476	1.062
#3	.1276	.0620	.2061	.2017	8.244	1.041	.1363	.3479	1.063

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2445.7**	**4593.9**	**38484.**	**3713.1**
Stddev	5.5	5.8	54.	9.1
%RSD	.22460	.12645	.14016	.24507
#1	2439.9	4594.8	38509.	3723.0
#2	2446.3	4599.2	38422.	3705.0
#3	2450.9	4587.7	38521.	3711.5

Zoom In ▶ Zoom Out

Sample Name: MidStd Acquired: 5/16/2016 10:29:46 Type: Cal
Method: 60102007_042011(v113) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.1414**	**9.005**	**.3515**	**18.11**	**21.64**	**9.123**	**9.170**	**5.117**	**1.019**
Stddev	.0006	.093	.0003	.20	.21	.091	.007	.005	.001
%RSD	.4382	1.028	.0902	1.121	.9495	.9966	.0749	.0948	.1390
#1	.1414	8.900	.3518	17.88	21.42	9.024	9.176	5.122	1.020
#2	.1408	9.037	.3512	18.18	21.70	9.143	9.162	5.112	1.018
#3	.1421	9.077	.3515	18.27	21.82	9.203	9.173	5.117	1.018

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1.894**	**6.536**	**3.948**	**.9401**	**5.676**	**2.272**	**17.06**	**3.038**	**1.550**
Stddev	.004	.065	.041	.0073	.008	.002	.18	.004	.003
%RSD	.2249	.9984	1.030	.7797	.1339	.0910	1.035	.1295	.1669
#1	1.889	6.463	3.902	.9321	5.684	2.273	16.87	3.039	1.549
#2	1.897	6.559	3.965	.9416	5.673	2.270	17.10	3.034	1.548
#3	1.896	6.587	3.978	.9465	5.669	2.274	17.21	3.042	1.553

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.5154**	**.2532**	**.8755**	**.7893**	**32.85**	**4.143**	**.5605**	**1.387**	**4.274**
Stddev	.0005	.0004	.0016	.0008	.37	.006	.0011	.000	.005
%RSD	.1023	.1774	.1801	.0970	1.131	.1484	.1949	.0314	.1256
#1	.5154	.2534	.8768	.7900	32.42	4.146	.5617	1.387	4.279
#2	.5149	.2526	.8738	.7894	33.00	4.147	.5596	1.387	4.268
#3	.5159	.2535	.8760	.7885	33.11	4.136	.5603	1.387	4.274

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2226.9**	**4439.0**	**37548.**	**3692.8**
Stddev	2.5	4.1	61.	37.8
%RSD	.11308	.09322	.16120	1.0245
#1	2225.1	4434.6	37487.	3736.4
#2	2229.8	4442.8	37608.	3673.8
#3	2225.9	4439.5	37548.	3668.3

Zoom In ▶ Zoom Out

Sample Name: HighStd Acquired: 5/16/2016 10:33:57 Type: Cal
Method: 60102007_042011(v113) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.2760**	**17.62**	**.7004**	**35.66**	**42.19**	**17.78**	**17.81**	**9.938**	**1.959**
Stddev	.0025	.05	.0024	.07	.07	.07	.07	.039	.007
%RSD	.9155	.2890	.3435	.1859	.1709	.4181	.3924	.3948	.3589
#1	.2742	17.62	.6979	35.66	42.18	17.82	17.73	9.892	1.959
#2	.2749	17.67	.7027	35.73	42.27	17.83	17.82	9.962	1.967
#3	.2789	17.57	.7007	35.60	42.12	17.69	17.87	9.958	1.953

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3.655**	**12.04**	**7.762**	**1.853**	**10.67**	**4.409**	**33.53**	**5.905**	**3.100**
Stddev	.009	.02	.026	.017	.03	.017	.02	.026	.015
%RSD	.2553	.1953	.3314	.9034	.2616	.3833	.0538	.4330	.4755
#1	3.645	12.03	7.765	1.866	10.70	4.390	33.55	5.877	3.089
#2	3.663	12.07	7.786	1.859	10.66	4.416	33.53	5.910	3.095
#3	3.657	12.03	7.735	1.834	10.65	4.421	33.52	5.928	3.117

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1.023**	**.5015**	**1.640**	**1.505**	**63.61**	**7.842**	**1.100**	**2.684**	**8.298**
Stddev	.005	.0031	.004	.006	.24	.004	.004	.006	.018
%RSD	.5309	.6092	.2535	.4139	.3780	.0553	.3257	.2185	.2190
#1	1.017	.4980	1.635	1.498	63.54	7.847	1.100	2.690	8.278
#2	1.025	.5033	1.642	1.507	63.88	7.841	1.096	2.683	8.305
#3	1.026	.5033	1.643	1.510	63.41	7.839	1.103	2.678	8.312

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2093.5**	**4340.4**	**37148.**	**3659.6**
Stddev	3.3	15.9	105.	16.1
%RSD	.15545	.36545	.28226	.43949
#1	2097.0	4357.2	37224.	3648.0
#2	2093.0	4325.7	37028.	3652.9
#3	2090.6	4338.3	37192.	3678.0

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Zoom In Zoom Out

Sample Name: HSTD Acquired: 5/16/2016 10:38:08 Type: QC
Method: 60102007_042011(v113) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4945	79.97	4.004	4.024	3.979	79.45	3.967	3.957	3.945
Stddev	.0025	.36	.017	.010	.019	.74	.009	.006	.006
%RSD	.5138	.4489	.4141	.2441	.4766	.9322	.2384	.1460	.1475
#1	.4974	79.73	3.994	4.018	3.963	78.74	3.957	3.954	3.939
#2	.4929	79.79	4.023	4.019	3.974	79.39	3.976	3.964	3.946
#3	.4932	80.38	3.995	4.035	4.000	80.22	3.968	3.954	3.950
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.933	77.47	80.31	79.64	3.913	3.960	80.36	3.958	4.021
Stddev	.008	.42	.43	.89	.037	.004	.21	.009	.004
%RSD	.2143	.5373	.5298	1.118	.9367	.1144	.2668	.2139	.1008
#1	3.941	77.24	79.86	78.80	3.871	3.957	80.27	3.952	4.017
#2	3.924	77.22	80.36	79.55	3.936	3.965	80.19	3.968	4.025
#3	3.935	77.95	80.70	80.58	3.933	3.957	80.60	3.954	4.022
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.981	3.984	3.916	3.927	3.935	3.917	3.973	3.954	3.982
Stddev	.011	.005	.008	.003	.049	.015	.005	.001	.008
%RSD	.2779	.1248	.2050	.0642	1.242	.3760	.1197	.0142	.2100
#1	3.989	3.980	3.919	3.925	3.879	3.923	3.972	3.954	3.972
#2	3.986	3.990	3.921	3.930	3.966	3.900	3.979	3.954	3.987
#3	3.968	3.982	3.907	3.927	3.961	3.927	3.969	3.955	3.986
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: HSTD Acquired: 5/16/2016 10:38:08 Type: QC
Method: 60102007_042011(v113) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2100.4	4365.8	37254.	3716.0
Stddev	1.1	6.5	64.	38.2
%RSD	.05058	.14788	.17246	1.0293
#1	2100.4	4365.6	37321.	3739.6
#2	2101.5	4359.4	37249.	3736.5
#3	2099.3	4372.3	37192.	3671.9

Zoom In Zoom Out

Sample Name: ICV Acquired: 5/16/2016 10:46:12 Type: QC
Method: 60102007_042011(v113) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2482	41.60	2.047	2.088	2.102	42.18	2.089	2.088	2.098
Stddev	.0020	.15	.005	.007	.006	.21	.006	.005	.005
%RSD	.8125	.3571	.2689	.3612	.2831	.4949	.3087	.2653	.2475
#1	.2483	41.57	2.045	2.091	2.099	42.17	2.090	2.092	2.098
#2	.2502	41.46	2.042	2.079	2.098	41.98	2.082	2.082	2.103
#3	.2462	41.76	2.053	2.093	2.109	42.39	2.094	2.092	2.093
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.005	41.28	42.09	42.74	2.157	1.933	42.86	2.114	2.067
Stddev	.003	.10	.23	.25	.002	.004	.06	.006	.008
%RSD	.1519	.2382	.5509	.5948	.0938	.2006	.1284	.2888	.3786
#1	2.004	41.32	42.03	42.70	2.157	1.934	42.90	2.118	2.068
#2	2.008	41.17	41.90	42.51	2.159	1.929	42.80	2.107	2.058
#3	2.002	41.36	42.35	43.01	2.155	1.936	42.88	2.118	2.074
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.057	2.071	.1218	2.059	1.935	2.001	2.135	1.948	2.116
Stddev	.007	.005	.0013	.010	.014	.002	.014	.006	.009
%RSD	.3480	.2366	1.086	.4739	.7152	.0892	.6342	.3319	.4099
#1	2.064	2.071	.1227	2.064	1.939	2.001	2.142	1.952	2.115
#2	2.050	2.066	.1203	2.048	1.920	2.003	2.119	1.953	2.108
#3	2.058	2.076	.1224	2.066	1.947	2.000	2.143	1.941	2.125
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: ICV Acquired: 5/16/2016 10:46:12 Type: QC
Method: 60102007_042011(v113) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2260.7	4498.6	37846.	3714.6
Stddev	5.4	9.5	41.	10.7
%RSD	.23966	.21194	.10936	.28714
#1	2254.5	4487.9	37875.	3720.8
#2	2263.9	4501.9	37799.	3720.7
#3	2263.8	4506.0	37864.	3702.3

SGS ACCUTEST FA33720

Zoom In Zoom Out

Sample Name: ICB Acquired: 5/16/2016 10:53:56 Type: QC
Method: 60102007_042011(v113) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0007**	**.0015**	**.0006**	**-.0001**	**-.0002**	**-.0081**	**-.0001**	**-.0001**	**-.0004**
Stddev	.0001	.0061	.0004	.0002	.0001	.0025	.0001	.0001	.0001
%RSD	17.74	401.0	63.16	131.1	21.67	31.07	38.26	178.3	17.13
#1	.0007	.0023	.0004	.0001	-.0003	-.0081	-.0002	-.0001	-.0003
#2	.0006	-.0050	.0003	-.0002	-.0002	-.0106	-.0001	.0001	-.0004
#3	.0008	.0072	.0009	-.0003	-.0002	-.0056	-.0001	-.0001	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0004**	**-.0085**	**-.0256**	**-.0104**	**-.0003**	**-.0006**	**-.0080**	**.0001**	**-.0006**
Stddev	.0001	.0019	.0219	.0153	.0000	.0000	.0026	.0002	.0006
%RSD	33.64	22.85	85.42	146.7	11.78	5.838	32.73	206.6	93.60
#1	-.0005	-.0070	-.0154	-.0062	-.0003	-.0005	-.0092	.0004	-.0003
#2	-.0003	-.0107	-.0108	-.0273	-.0002	-.0006	-.0098	.0000	-.0002
#3	-.0004	-.0078	-.0508	.0023	-.0003	-.0005	-.0050	.0000	-.0012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0014**	**.0008**	**.0033**	**-.0004**	**-.0003**	**-.0004**	**.0015**	**-.0003**	**-.0002**
Stddev	.0006	.0003	.0002	.0003	.0000	.0000	.0006	.0001	.0001
%RSD	47.11	36.18	5.067	89.79	11.67	8.871	37.69	34.29	24.33
#1	-.0010	.0005	.0031	-.0006	-.0003	-.0004	.0016	-.0002	-.0002
#2	-.0010	.0011	.0033	.0000	-.0003	-.0004	.0019	-.0002	-.0003
#3	-.0021	.0008	.0034	-.0006	-.0004	-.0004	.0009	-.0004	-.0002
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: ICB Acquired: 5/16/2016 10:53:56 Type: QC
Method: 60102007_042011(v113) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2593.2**	**4702.5**	**39133.**	**3758.9**
Stddev	8.4	1.3	63.	18.4
%RSD	.32215	.02667	.16012	.49023
#1	2594.6	4703.5	39184.	3746.2
#2	2600.9	4701.1	39063.	3780.0
#3	2584.3	4703.0	39153.	3750.4

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/16/2016 10:58:16 Type: QC
Method: 60102007_042011(v113) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0099**	**.2139**	**.0107**	**.2092**	**.0051**	**1.097**	**.0054**	**.0549**	**.0112**
Stddev	.0002	.0045	.0005	.0023	.0000	.014	.0001	.0008	.0004
%RSD	2.253	2.119	4.555	1.078	.9802	1.264	1.891	1.512	3.947
#1	.0096	.2187	.0105	.2093	.0051	1.103	.0055	.0558	.0117
#2	.0098	.2097	.0103	.2069	.0051	1.081	.0053	.0543	.0109
#3	.0101	.2132	.0112	.2114	.0050	1.107	.0053	.0545	.0109
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0262**	**.3070**	**10.42**	**5.384**	**.0172**	**.0491**	**10.64**	**.0451**	**.0050**
Stddev	.0003	.0020	.10	.094	.0001	.0009	.09	.0010	.0006
%RSD	1.247	.6661	.9495	1.737	.6908	1.753	.8276	2.168	12.34
#1	.0264	.3080	10.40	5.443	.0171	.0500	10.61	.0463	.0043
#2	.0258	.3047	10.34	5.276	.0174	.0489	10.58	.0446	.0052
#3	.0263	.3083	10.53	5.434	.0172	.0484	10.74	.0445	.0054
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0044**	**.0088**	**.0549**	**.0533**	**.0098**	**.0100**	**.0110**	**.0520**	**.0229**
Stddev	.0006	.0024	.0014	.0012	.0002	.0001	.0008	.0001	.0004
%RSD	13.73	27.32	2.522	2.175	1.763	.8796	7.294	.1597	1.776
#1	.0050	.0091	.0562	.0546	.0099	.0100	.0115	.0519	.0233
#2	.0041	.0111	.0550	.0525	.0096	.0100	.0114	.0520	.0226
#3	.0039	.0063	.0534	.0527	.0099	.0101	.0100	.0521	.0227
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/16/2016 10:58:16 Type: QC
Method: 60102007_042011(v113) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2525.2**	**4731.0**	**38378.**	**3763.2**
Stddev	38.4	78.1	131.	36.1
%RSD	1.5206	1.6505	.34162	.95992
#1	2480.9	4641.4	38372.	3758.5
#2	2546.9	4766.7	38251.	3801.5
#3	2547.8	4784.8	38513.	3729.7

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/16/2016 11:05:13 Type: QC
Method: 60102007_042011(v113) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0007**	**512.3**	**-.0010**	**-.0010**	**-.0003**	**498.1**	**.0000**	**-.0003**	**.0000**
Stddev	.0001	7.2	.0017	.0006	.0001	4.1	.0002	.0002	.0002
%RSD	12.84	1.401	162.0	58.91	33.33	.8283	526.2	54.80	698.4
#1	.0007	513.7	-.0003	-.0011	-.0002	499.0	.0000	-.0002	.0001
#2	.0008	518.6	.0001	-.0003	-.0003	501.8	-.0001	-.0002	.0002
#3	.0006	504.5	-.0030	-.0015	-.0005	493.7	.0003	-.0005	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0006**	**186.4**	**.0250**	**543.1**	**-.0005**	**.0000**	**.1385**	**.0000**	**.0003**
Stddev	.0002	1.1	.0715	3.4	.0000	.0003	.0016	.000	.0002
%RSD	27.01	.5990	286.1	.6236	7.337	1173.	1.162	1058.	72.11
#1	-.0007	186.2	-.0549	542.4	-.0004	.0003	.1398	-.0002	.0001
#2	-.0007	187.6	.0468	546.8	-.0004	-.0003	.1389	.0000	.0006
#3	-.0004	185.4	.0830	540.2	-.0005	.0001	.1367	.0002	.0003
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0016**	**.0000**	**.0110**	F **.0014**	**-.0006**	**-.0006**	**.0000**	**-.0005**	**-.0022**
Stddev	.0016	.002	.0007	.0004	.0000	.0002	.0005	.0001	.0001
%RSD	99.33	5054.	6.513	31.54	5.520	27.14	1537.	27.97	5.093
#1	-.0017	.0003	.0109	.0009	-.0006	-.0004	-.0005	-.0007	-.0023
#2	.0000	.0019	.0118	.0016	-.0007	-.0007	.0005	-.0006	-.0022
#3	-.0032	-.0023	.0104	.0016	-.0006	-.0007	.0001	-.0004	-.0021
Check ?	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.0010					
Low Limit				-.0010					

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/16/2016 11:05:13 Type: QC
Method: 60102007_042011(v113) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1979.4**	**4124.5**	**33326.**	**3489.1**
Stddev	1.2	3.3	153.	31.1
%RSD	.06179	.07998	.45779	.89247
#1	1980.5	4124.2	33485.	3493.6
#2	1978.1	4121.4	33180.	3456.0
#3	1979.8	4127.9	33313.	3517.8

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 5/16/2016 11:13:18 Type: QC
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.059**	**526.0**	**1.141**	**.5312**	**.5214**	**501.7**	**1.026**	**.5023**	**.5472**
Stddev	.005	10.1	.004	.0066	.0055	5.6	.002	.0015	.0006
%RSD	.5184	1.920	.3504	1.236	1.056	1.109	.2172	.2924	.1029
#1	1.058	534.2	1.145	.5357	.5266	505.5	1.024	.5009	.5467
#2	1.065	528.9	1.137	.5341	.5220	504.2	1.028	.5038	.5471
#3	1.055	514.7	1.143	.5236	.5157	495.3	1.025	.5021	.5478
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5456**	**188.0**	**.0085**	**540.0**	**.5450**	**.9787**	**.1484**	**1.017**	**1.023**
Stddev	.0007	2.2	.0192	6.5	.0025	.0018	.0139	.002	.003
%RSD	.1369	1.163	225.0	1.203	.4576	.1823	9.357	.1581	.3150
#1	.5453	189.8	-.0063	546.4	.5425	.9766	.1644	1.016	1.019
#2	.5464	188.6	.0302	540.3	.5449	.9795	.1399	1.019	1.025
#3	.5450	185.6	.0017	533.4	.5475	.9799	.1409	1.017	1.024
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.045**	**1.069**	**.1442**	**.9698**	**1.027**	**1.051**	**.9869**	**.4982**	**1.038**
Stddev	.002	.004	.0014	.0026	.013	.001	.0045	.0012	.003
%RSD	.1740	.3441	.9425	.2719	1.278	.0935	.4550	.2333	.2583
#1	1.044	1.067	.1453	.9679	1.038	1.050	.9833	.4969	1.036
#2	1.047	1.074	.1427	.9728	1.030	1.051	.9854	.4986	1.041
#3	1.045	1.067	.1447	.9686	1.013	1.052	.9919	.4991	1.038
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 5/16/2016 11:13:18 Type: QC
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1937.6**	**4072.6**	**33130.**	**3494.3**
Stddev	4.4	7.0	49.	26.8
%RSD	.22464	.17263	.14789	.76688
#1	1942.3	4080.3	33147.	3472.2
#2	1936.9	4070.9	33168.	3486.7
#3	1933.6	4066.6	33074.	3524.1

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/16/2016 11:26:38 Type: QC
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2565**	**40.38**	**2.080**	**2.008**	**2.035**	**40.48**	**2.098**	**2.076**	**2.082**
Stddev	.0011	.08	.002	.005	.005	.16	.001	.001	.003
%RSD	.4234	.1990	.0995	.2623	.2562	.3879	.0370	.0682	.1507
#1	.2569	40.40	2.080	2.009	2.032	40.30	2.098	2.078	2.084
#2	.2553	40.45	2.078	2.013	2.041	40.58	2.097	2.075	2.084
#3	.2574	40.29	2.082	2.002	2.031	40.55	2.098	2.076	2.078
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.037**	**42.07**	**40.22**	**40.28**	**2.122**	**2.077**	**40.93**	**2.106**	**2.055**
Stddev	.007	.13	.03	.19	.006	.002	.07	.001	.006
%RSD	.3498	.3092	.0844	.4644	.2896	.0735	.1765	.0425	.3012
#1	2.031	42.05	40.25	40.08	2.125	2.078	40.98	2.105	2.057
#2	2.034	42.21	40.19	40.29	2.127	2.075	40.96	2.106	2.048
#3	2.045	41.95	40.23	40.46	2.115	2.077	40.85	2.107	2.060
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.076**	**2.078**	**2.146**	**2.099**	**2.009**	**2.109**	**2.080**	**2.096**	**2.080**
Stddev	.002	.007	.002	.004	.007	.002	.006	.004	.003
%RSD	.0913	.3219	.0961	.1738	.3543	.0870	.2962	.1881	.1178
#1	2.076	2.084	2.148	2.103	2.011	2.108	2.085	2.097	2.083
#2	2.074	2.079	2.144	2.096	2.015	2.111	2.073	2.100	2.079
#3	2.077	2.071	2.145	2.097	2.001	2.107	2.081	2.092	2.078
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/16/2016 11:26:38 Type: QC
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2215.1**	**4372.9**	**37035.**	**3680.3**
Stddev	6.8	7.3	118.	12.3
%RSD	.30640	.16673	.31750	.33489
#1	2208.5	4364.7	36900.	3694.5
#2	2222.0	4375.5	37087.	3674.2
#3	2214.7	4378.5	37117.	3672.3

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/16/2016 11:35:18 Type: QC
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**.0116**	**.0003**	**-.0001**	**.0001**	**.0045**	**.0001**	**.0000**	**-.0001**
Stddev	.0002	.0014	.0009	.0000	.0000	.0028	.0001	.0000	.0001
%RSD	43.59	12.04	286.5	43.50	50.92	62.72	59.48	143.2	134.3
#1	.0006	.0131	-.0006	-.0001	.0000	.0066	.0001	.0000	.0000
#2	.0004	.0110	.0011	-.0001	.0001	.0057	.0001	.0001	.0000
#3	.0003	.0105	.0005	-.0001	.0000	.0013	.0000	.0000	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**-.0021**	**-.0439**	**.0154**	**.0000**	**-.0009**	**-.0087**	**.0002**	**-.0001**
Stddev	.0001	.0003	.0372	.0099	.0000	.0001	.0048	.0001	.0008
%RSD	33.72	15.04	84.79	63.96	318.4	10.56	54.90	63.84	605.2
#1	.0005	-.0017	-.0869	.0262	.0000	-.0008	-.0133	.0002	.0007
#2	.0005	-.0021	-.0235	.0067	.0000	-.0009	-.0091	.0004	-.0009
#3	.0003	-.0023	-.0213	.0134	.0000	-.0009	-.0037	.0001	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0011**	**-.0005**	**.0011**	**-.0001**	**-.0001**	**-.0006**	**.0005**	**.0001**	**.0000**
Stddev	.0010	.0012	.0004	.0004	.0000	.0000	.0003	.0002	.000
%RSD	89.61	265.6	37.56	271.5	32.11	6.844	57.05	231.5	277.7
#1	.0000	-.0011	.0014	-.0003	-.0001	-.0006	.0003	-.0001	.0000
#2	-.0018	.0010	.0006	.0003	-.0001	-.0006	.0008	.0003	-.0001
#3	-.0016	-.0012	.0011	-.0004	-.0001	-.0006	.0004	.0001	-.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/16/2016 11:35:18 Type: QC
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2619.2**	**4675.9**	**39814.**	**3841.5**
Stddev	8.3	25.9	249.	10.3
%RSD	.31594	.55422	.62642	.26835
#1	2623.1	4690.5	40006.	3850.4
#2	2624.7	4691.1	39903.	3830.2
#3	2609.7	4645.9	39532.	3843.8

Zoom In Zoom Out

Sample Name: FA33720-2 Acquired: 5/16/2016 11:40:51 Type: Unk
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0054**	**368.8**	**.1917**	**3.285**	**.0242**	**2185.**	**.0123**	**.1363**	**.2995**
Stddev	.0013	2.5	.0114	.012	.0005	11.	.0009	.0021	.0053
%RSD	24.97	.6695	5.920	.3689	2.179	.5152	7.472	1.513	1.778
#1	.0049	367.9	.1958	3.281	.0239	2177.	.0133	.1352	.3040
#2	.0044	366.9	.1789	3.275	.0240	2180.	.0115	.1350	.3009
#3	.0069	371.6	.2005	3.299	.0248	2198.	.0121	.1387	.2936

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.6367**	**376.8**	**66.01**	**308.6**	**6.793**	**-.0028**	**2.264**	**.3121**	**1.595**
Stddev	.0020	1.7	.38	2.4	.018	.0020	.045	.0026	.009
%RSD	.3207	.4447	.5762	.7923	.2618	72.42	1.988	.8218	.5925
#1	.6349	375.7	66.08	308.8	6.806	-.0007	2.281	.3096	1.589
#2	.6389	375.9	65.60	306.0	6.800	-.0030	2.213	.3147	1.606
#3	.6364	378.7	66.35	310.9	6.773	-.0048	2.297	.3120	1.589

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0239**	**.0144**	**25.15**	**.0313**	**2.718**	**7.272**	**.0054**	**.5557**	**1.373**
Stddev	.0087	.0186	.03	.0064	.016	.018	.0046	.0006	.002
%RSD	36.19	129.3	.1071	20.37	.5960	.2533	85.96	.1168	.1407
#1	-.0144	.0236	25.13	.0357	2.710	7.286	.0067	.5550	1.372
#2	-.0261	.0265	25.13	.0343	2.708	7.278	.0091	.5562	1.372
#3	-.0313	-.0070	25.18	.0240	2.737	7.251	.0002	.5559	1.376

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2221.2**	**4627.9**	**38947.**	**3857.6**
Stddev	3.8	11.7	179.	13.1
%RSD	.17252	.25348	.45951	.34007
#1	2223.1	4639.1	38777.	3870.4
#2	2216.8	4615.7	38930.	3858.3
#3	2223.6	4629.1	39134.	3844.2

Zoom In Zoom Out

Sample Name: FA33679-3 Acquired: 5/16/2016 11:45:11 Type: Unk
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	**.0001**	**.0543**	**F 5.267**	**F 4.192**	**.0000**	**178.4**	**.0025**	**.0015**
Stddev	.0001	.0133	.010	.012	.000	1.1	.0002	.0000
%RSD	78.34	24.51	.1921	.2908	95.43	.6193	6.883	2.499
#1	.0002	.0685	5.267	4.200	-.0001	177.9	.0024	.0016
#2	.0000	.0522	5.277	4.178	-.0001	177.6	.0027	.0016
#3	.0001	.0421	5.257	4.199	.0000	179.6	.0024	.0015

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	**.0017**	**.0054**	**259.7**	**5.379**	**44.52**	**.0377**	**.0479**	**F 135.1**
Stddev	.0001	.0003	1.0	.022	.37	.0002	.0001	.4
%RSD	7.838	5.825	.3927	.4014	.8276	.6108	.1953	.2682
#1	.0016	.0058	259.4	5.354	44.30	.0377	.0480	135.2
#2	.0019	.0051	258.8	5.389	44.32	.0375	.0479	134.7
#3	.0017	.0053	260.8	5.393	44.95	.0380	.0478	135.4

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	**.0126**	**F -.0096**	**.0005**	**-.0048**	**19.29**	**.0017**	**.9742**	**.0028**
Stddev	.0001	.0006	.0004	.0023	.02	.0002	.0039	.0001
%RSD	.7391	6.483	84.33	47.77	.0813	10.26	.3999	3.265
#1	.0125	-.0090	.0001	-.0048	19.31	.0018	.9758	.0027
#2	.0127	-.0095	.0009	-.0025	19.28	.0018	.9698	.0028
#3	.0127	-.0103	.0005	-.0070	19.28	.0015	.9771	.0028

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0053**	**.0199**	**.0060**
Stddev	.0005	.0001	.0001
%RSD	8.856	.4072	2.295
#1	.0054	.0199	.0062
#2	.0049	.0200	.0059
#3	.0058	.0198	.0059

Zoom In Zoom Out

Sample Name: FA33679-3 Acquired: 5/16/2016 11:45:11 Type: Unk
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2222.0**	**4200.9**	**35419.**	**3646.6**
Stddev	6.5	9.0	74.	27.5
%RSD	.29338	.21378	.20862	.75307
#1	2215.1	4190.8	35351.	3663.4
#2	2222.8	4204.1	35408.	3661.5
#3	2228.0	4207.9	35498.	3614.9

Zoom In Zoom Out

Sample Name: MP30353-D1 Acquired: 5/16/2016 11:49:32 Type: Unk
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	**.0000**	**.0465**	**F 5.195**	**F 4.104**	**-.0001**	**174.6**	**.0024**	**.0016**
Stddev	.000	.0081	.014	.012	.0000	.5	.0001	.0001
%RSD	1035.	17.37	.2694	.2837	41.34	.3134	4.086	6.310
#1	-.0002	.0526	5.183	4.091	-.0001	174.4	.0023	.0015
#2	-.0001	.0496	5.193	4.113	-.0001	174.1	.0023	.0017
#3	.0003	.0374	5.210	4.107	-.0001	175.2	.0025	.0016

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	**.0017**	**.0054**	**254.6**	**5.264**	**43.31**	**.0364**	**.0472**	**F 131.7**
Stddev	.0002	.0004	.5	.018	.08	.0002	.0004	.2
%RSD	9.004	7.437	.1831	.3513	.1954	.6180	.8324	.1711
#1	.0016	.0049	254.4	5.243	43.27	.0366	.0469	131.5
#2	.0019	.0054	254.2	5.278	43.25	.0362	.0471	131.8
#3	.0018	.0057	255.1	5.271	43.41	.0363	.0476	131.8

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	**.0121**	**F -.0103**	**.0005**	**-.0044**	**18.83**	**.0011**	**.9528**	**.0023**
Stddev	.0003	.0002	.0007	.0012	.05	.0002	.0037	.0000
%RSD	2.555	1.757	149.1	26.59	.2816	18.08	.3929	1.684
#1	.0119	-.0104	-.0002	-.0036	18.79	.0009	.9498	.0023
#2	.0125	-.0102	.0011	-.0038	18.82	.0013	.9516	.0023
#3	.0120	-.0101	.0005	-.0057	18.89	.0011	.9570	.0024

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0058**	**.0197**	**.0059**
Stddev	.0006	.0003	.0000
%RSD	10.58	1.365	.5516
#1	.0054	.0200	.0059
#2	.0056	.0197	.0058
#3	.0065	.0194	.0058

Zoom In Zoom Out

Sample Name: MP30353-D1 Acquired: 5/16/2016 11:49:32 Type: Unk
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2237.9**	**4246.7**	**36061.**	**3686.9**
Stddev	1.0	3.4	143.	14.8
%RSD	.04376	.07990	.39700	.40053
#1	2238.8	4250.5	35985.	3688.1
#2	2237.9	4245.6	36226.	3701.1
#3	2236.9	4244.1	35972.	3671.6

Zoom In Zoom Out

Sample Name: MP30353-S1 Acquired: 5/16/2016 11:53:54 Type: Unk
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0509**	**27.50**	F **7.007**	F **6.164**	**.0530**	**199.2**	**.0533**	**.5055**	**.2082**
Stddev	.0004	.07	.007	.023	.0002	.4	.0001	.0007	.0002
%RSD	.7955	.2387	.0997	.3762	.4397	.1983	.2228	.1380	.0881
#1	.0511	27.43	7.005	6.163	.0529	198.8	.0532	.5049	.2080
#2	.0511	27.56	7.001	6.188	.0529	199.4	.0534	.5054	.2083
#3	.0504	27.50	7.015	6.142	.0533	199.5	.0534	.5063	.2083

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.2756**	**272.8**	**31.01**	**68.45**	**.5623**	**.5343**	F **156.1**	**.5249**	**.4747**
Stddev	.0015	.4	.08	.13	.0022	.0001	2.4	.0006	.0011
%RSD	.5278	.1431	.2460	.1854	.3954	.0204	1.550	.1147	.2373
#1	.2740	272.5	30.93	68.50	.5641	.5344	157.5	.5253	.4760
#2	.2769	272.6	31.04	68.30	.5598	.5341	157.5	.5242	.4742
#3	.2759	273.2	31.07	68.54	.5631	.5343	153.3	.5251	.4739

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.5287**	**2.077**	**18.31**	**.4923**	**1.434**	**.5071**	**1.903**	**.5086**	**.5135**
Stddev	.0007	.002	.01	.0005	.001	.0017	.002	.0013	.0005
%RSD	.1317	.1167	.0529	.0980	.0377	.3410	.0956	.2638	.0939
#1	.5283	2.080	18.30	.4928	1.433	.5080	1.903	.5101	.5136
#2	.5283	2.076	18.30	.4922	1.434	.5051	1.905	.5075	.5130
#3	.5295	2.076	18.32	.4919	1.434	.5081	1.902	.5082	.5139

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2176.6**	**4253.7**	**36121.**	**3639.9**
Stddev	4.9	4.9	127.	9.3
%RSD	.22351	.11594	.35282	.25615
#1	2171.2	4255.4	35976.	3629.4
#2	2180.7	4257.5	36215.	3647.2
#3	2178.0	4248.1	36172.	3643.2

Zoom In Zoom Out

Sample Name: MP30353-S2 Acquired: 5/16/2016 11:58:17 Type: Unk
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0505**	**27.58**	F **7.078**	F **6.121**	**.0530**	**202.1**	**.0542**	**.5066**	**.2106**
Stddev	.0006	.16	.009	.043	.0003	1.3	.0004	.0007	.0003
%RSD	1.261	.5881	.1278	.7043	.5451	.6307	.7290	.1361	.1390
#1	.0499	27.55	7.068	6.116	.0528	202.2	.0543	.5063	.2109
#2	.0505	27.43	7.084	6.080	.0528	200.8	.0546	.5074	.2105
#3	.0512	27.75	7.084	6.166	.0533	203.3	.0538	.5061	.2104

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.2743**	**276.0**	**31.20**	**69.43**	**.5705**	**.5368**	F **158.3**	**.5302**	**.4751**
Stddev	.0015	1.8	.13	.56	.0018	.0004	.9	.0014	.0023
%RSD	.5483	.6694	.4191	.8004	.3125	.0695	.5991	.2722	.4830
#1	.2743	275.6	31.22	69.38	.5724	.5368	158.0	.5296	.4733
#2	.2727	274.3	31.06	68.91	.5690	.5371	159.4	.5318	.4777
#3	.2757	278.0	31.32	70.01	.5699	.5364	157.5	.5291	.4744

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.5354**	**2.094**	**18.79**	**.4943**	**1.453**	**.5145**	**1.914**	**.5152**	**.5116**
Stddev	.0021	.005	.01	.0012	.009	.0024	.006	.0009	.0020
%RSD	.3866	.2625	.0306	.2431	.6534	.4693	.3122	.1779	.3939
#1	.5350	2.089	18.78	.4929	1.451	.5169	1.914	.5157	.5103
#2	.5377	2.100	18.79	.4952	1.445	.5121	1.920	.5141	.5139
#3	.5336	2.092	18.79	.4947	1.463	.5146	1.908	.5158	.5106

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2165.4**	**4206.9**	**35541.**	**3622.1**
Stddev	3.6	3.2	93.	20.4
%RSD	.16818	.07498	.26307	.56422
#1	2163.4	4204.3	35478.	3629.0
#2	2163.1	4205.9	35648.	3638.2
#3	2169.6	4210.4	35496.	3599.1

Zoom In Zoom Out

Sample Name: MP30353-PS1 Acquired: 5/16/2016 12:02:45 Type: Unk
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0509**	**2.631**	F **5.198**	F **4.346**	**.0523**	**178.4**	**.0539**	**.0528**	**.0553**
Stddev	.0011	.024	.050	.017	.0003	1.0	.0006	.0005	.0006
%RSD	2.105	.9117	.9568	.3828	.5157	.5431	1.161	.9195	1.046
#1	.0511	2.611	5.249	4.365	.0522	179.3	.0546	.0532	.0549
#2	.0519	2.657	5.195	4.336	.0526	178.7	.0538	.0529	.0552
#3	.0497	2.624	5.150	4.336	.0520	177.4	.0533	.0522	.0560

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.1145**	**255.2**	**15.38**	**48.16**	**.0912**	**.1464**	F **141.0**	**.1145**	**.0380**
Stddev	.0009	.8	.09	.21	.0003	.0015	1.0	.0016	.0008
%RSD	.7748	.2944	.5725	.4330	.3177	1.016	.7160	1.385	2.151
#1	.1156	255.8	15.48	48.28	.0915	.1476	139.8	.1161	.0373
#2	.1140	255.6	15.37	48.27	.0912	.1468	141.6	.1145	.0378
#3	.1141	254.4	15.30	47.92	.0909	.1447	141.5	.1129	.0389

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.1126**	**.0993**	**18.60**	**.0493**	**.9920**	**.1078**	**.1010**	**.0702**	**.2719**
Stddev	.0021	.0006	.18	.0006	.0014	.0003	.0005	.0004	.0022
%RSD	1.846	.5759	.9416	1.260	.1404	.2843	.4799	.5956	.8232
#1	.1150	.0999	18.78	.0496	.9935	.1080	.1015	.0703	.2741
#2	.1113	.0988	18.59	.0485	.9919	.1079	.1009	.0697	.2721
#3	.1116	.0991	18.43	.0496	.9907	.1074	.1005	.0705	.2696

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2240.5**	**4271.4**	**35840.**	**3678.8**
Stddev	18.1	33.8	144.	10.4
%RSD	.80588	.79129	.40256	.28213
#1	2220.9	4237.9	35675.	3670.5
#2	2244.1	4270.7	35942.	3675.5
#3	2256.4	4305.5	35902.	3690.4

Zoom In Zoom Out

Sample Name: MP30353-SD1 Acquired: 5/16/2016 12:07:03 Type: Unk
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0015**	**.0865**	**5.349**	**4.170**	**-.0016**	**184.0**	**.0007**	**.0008**	**.0009**
Stddev	.0008	.0327	.020	.018	.0004	.9	.0003	.0002	.0004
%RSD	55.78	37.78	.3655	.4345	23.95	.5015	45.31	24.57	46.04
#1	.0024	.0735	5.337	4.191	-.0012	183.2	.0011	.0009	.0006
#2	.0009	.1236	5.338	4.156	-.0019	185.0	.0004	.0006	.0014
#3	.0011	.0622	5.371	4.164	-.0016	183.9	.0007	.0010	.0008

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0057**	**276.2**	**5.581**	**45.93**	**.0376**	**.0430**	**135.9**	**.0096**	**-.0097**
Stddev	.0007	.9	.161	.50	.0002	.0007	.2	.0007	.0013
%RSD	11.97	.3142	2.886	1.078	.4815	1.583	.1251	7.412	13.14
#1	.0057	275.2	5.561	45.44	.0377	.0431	136.1	.0097	-.0088
#2	.0050	276.9	5.430	46.43	.0377	.0436	135.7	.0103	-.0112
#3	.0063	276.5	5.751	45.92	.0374	.0422	135.9	.0089	-.0092

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0063**	**-.0073**	**19.72**	**-.0010**	**.9886**	**.0008**	**.0095**	**.0185**	**.0714**
Stddev	.0019	.0026	.02	.0020	.0007	.0006	.0026	.0009	.0005
%RSD	29.26	35.09	.0962	204.9	.0664	69.76	27.79	4.681	.7554
#1	-.0083	-.0079	19.72	.0013	.9888	.0015	.0077	.0181	.0708
#2	-.0046	-.0045	19.75	-.0026	.9890	.0004	.0082	.0195	.0718
#3	-.0062	-.0095	19.71	-.0016	.9878	.0006	.0125	.0180	.0716

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2462.9**	**4572.2**	**38605.**	**3795.4**
Stddev	2.0	3.4	121.	32.5
%RSD	.07962	.07383	.31392	.85754
#1	2463.6	4576.0	38739.	3829.5
#2	2464.4	4570.9	38571.	3764.6
#3	2460.7	4569.7	38504.	3792.2

Zoom In Zoom Out

Sample Name: FA33739-2 Acquired: 5/16/2016 12:11:28 Type: Unk
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 4.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0003**	**.0442**	**.0033**	**.0281**	**-.0015**	**85.57**	**-.0011**	**-.0016**	**.0076**
Stddev	.0006	.0070	.0034	.0008	.0002	.63	.0000	.0003	.0007
%RSD	172.4	15.84	102.8	3.020	13.12	.7417	3.587	18.87	8.780
#1	.0009	.0390	.0066	.0289	-.0018	85.85	-.0012	-.0014	.0069
#2	.0004	.0415	-.0002	.0273	-.0014	84.84	-.0011	-.0014	.0081
#3	-.0003	.0522	.0035	.0280	-.0015	86.02	-.0011	-.0019	.0078

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0030**	**.0925**	**13.38**	**231.2**	**.1082**	**-.0050**	**211.8**	**-.0015**	**-.0043**
Stddev	.0005	.0330	.20	2.0	.0003	.0003	.6	.0006	.0011
%RSD	17.90	35.67	1.507	.8475	.2363	5.311	.2776	37.42	25.18
#1	.0035	.0991	13.38	232.1	.1080	-.0052	212.2	-.0021	-.0034
#2	.0031	.1217	13.59	228.9	.1081	-.0051	211.1	-.0010	-.0055
#3	.0024	.0567	13.18	232.5	.1085	-.0047	212.0	-.0013	-.0039

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0089**	**.0016**	**29.29**	**-.0018**	**.4495**	**.0008**	**-.0002**	**.0011**	**.0914**
Stddev	.0044	.0043	.13	.0002	.0019	.0002	.0035	.0003	.0002
%RSD	49.62	266.0	.4369	13.45	.4323	28.87	2250.	24.75	.2385
#1	-.0127	.0057	29.15	-.0017	.4501	.0009	.0020	.0011	.0912
#2	-.0040	-.0029	29.36	-.0016	.4474	.0011	.0018	.0014	.0914
#3	-.0100	.0021	29.38	-.0020	.4512	.0006	-.0042	.0008	.0917

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2403.3**	**4539.0**	**38308.**	**3801.2**
Stddev	6.5	12.1	142.	47.0
%RSD	.26905	.26657	.36959	1.2356
#1	2407.2	4551.8	38327.	3772.2
#2	2406.9	4537.4	38439.	3855.4
#3	2395.8	4527.7	38158.	3776.1

Zoom In Zoom Out

Sample Name: FA33739-5 Acquired: 5/16/2016 12:15:57 Type: Unk
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0003**	**.0125**	**.0001**	**.0116**	**-.0008**	**38.16**	**-.0004**	**-.0009**	**-.0003**
Stddev	.0004	.0077	.0012	.0000	.0001	.19	.0000	.0002	.0001
%RSD	150.7	61.33	2088.	.2295	16.65	.4853	5.772	17.48	27.07
#1	-.0005	.0042	-.0010	.0116	-.0006	38.14	-.0004	-.0008	-.0003
#2	.0002	.0139	-.0002	.0116	-.0008	37.98	-.0005	-.0011	-.0002
#3	-.0004	.0194	.0013	.0116	-.0009	38.35	-.0004	-.0008	-.0003

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0008**	**2.228**	**6.138**	**6.143**	**.0480**	**-.0030**	**134.3**	**-.0005**	**.0001**
Stddev	.0004	.015	.074	.042	.0001	.0001	1.0	.0004	.0009
%RSD	51.29	.6891	1.203	.6841	.1923	4.164	.7198	77.42	774.8
#1	.0011	2.221	6.223	6.192	.0479	-.0031	134.0	-.0009	.0001
#2	.0009	2.218	6.093	6.119	.0481	-.0029	133.6	-.0001	.0010
#3	.0003	2.246	6.097	6.119	.0480	-.0029	135.4	-.0005	-.0008

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0031**	**.0001**	**5.383**	**-.0008**	**.1932**	**-.0013**	**.0010**	**-.0006**	**.0274**
Stddev	.0020	.0030	.007	.0011	.0016	.0001	.0023	.0001	.0002
%RSD	63.62	2014.	.1249	126.9	.8249	6.354	227.4	11.22	.6037
#1	-.0022	.0001	5.383	.0002	.1933	-.0013	-.0012	-.0006	.0275
#2	-.0054	-.0028	5.376	-.0007	.1915	-.0014	.0035	-.0007	.0274
#3	-.0017	.0032	5.390	-.0019	.1947	-.0012	.0008	-.0007	.0272

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2434.6**	**4588.8**	**38657.**	**3798.6**
Stddev	3.7	4.9	91.	21.1
%RSD	.15329	.10614	.23419	.55611
#1	2438.6	4589.1	38618.	3791.8
#2	2434.0	4593.5	38593.	3822.3
#3	2431.2	4583.8	38761.	3781.7

Zoom In Zoom Out

Sample Name: FA33739-6 Acquired: 5/16/2016 12:20:25 Type: Unk
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0010**	**.2335**	**-.0006**	**.0103**	**-.0018**	**21.10**	**-.0013**	**-.0011**	**.0068**
Stddev	.0006	.0033	.0020	.0007	.0003	.12	.0001	.0002	.0009
%RSD	60.64	1.427	319.7	6.882	16.98	.5718	9.290	13.98	12.62
#1	.0004	.2316	-.0026	.0098	-.0021	21.09	-.0013	-.0012	.0061
#2	.0015	.2373	.0014	.0100	-.0016	21.22	-.0011	-.0009	.0078
#3	.0009	.2315	-.0007	.0111	-.0017	20.98	-.0013	-.0012	.0066

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0015**	**-.0246**	**17.26**	**41.25**	**.0173**	**-.0079**	**374.6**	**.0001**	**-.0024**
Stddev	.0008	.0072	.08	.19	.0002	.0010	1.3	.0006	.0018
%RSD	51.81	29.44	.4514	.4669	1.236	12.31	.3375	831.0	72.53
#1	.0024	-.0175	17.30	41.14	.0171	-.0090	374.4	-.0005	-.0009
#2	.0008	-.0244	17.17	41.47	.0175	-.0071	375.9	.0007	-.0021
#3	.0014	-.0319	17.32	41.14	.0171	-.0077	373.4	.0001	-.0044

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0060**	**-.0007**	**2.146**	**-.0016**	**.2033**	**-.0010**	**-.0001**	**-.0004**	**.0631**
Stddev	.0033	.0080	.003	.0004	.0006	.0003	.0006	.0005	.0003
%RSD	55.97	1148.	.1603	23.08	.3113	32.62	490.6	136.6	.4432
#1	-.0027	.0027	2.146	-.0013	.2026	-.0009	-.0004	.0002	.0633
#2	-.0093	.0050	2.142	-.0021	.2035	-.0008	.0006	-.0006	.0632
#3	-.0059	-.0099	2.149	-.0016	.2038	-.0014	-.0006	-.0008	.0628

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2450.0**	**4611.2**	**38454.**	**3812.2**
Stddev	.3	9.7	40.	27.9
%RSD	.01302	.21117	.10482	.73232
#1	2450.2	4620.0	38434.	3803.5
#2	2450.2	4612.9	38428.	3789.7
#3	2449.6	4600.7	38500.	3843.5

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/16/2016 12:24:55 Type: QC
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2528**	**39.81**	**2.018**	**1.987**	**2.000**	**40.10**	**2.042**	**2.034**	**2.030**
Stddev	.0013	.16	.001	.009	.002	.17	.005	.002	.007
%RSD	.5277	.4108	.0378	.4412	.0845	.4256	.2379	.0819	.3712
#1	.2542	39.88	2.019	1.986	2.001	40.19	2.047	2.036	2.031
#2	.2527	39.62	2.017	1.978	1.999	39.90	2.038	2.033	2.037
#3	.2516	39.92	2.018	1.996	2.002	40.20	2.041	2.034	2.022
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.009**	**41.30**	**39.92**	**39.82**	**2.051**	**2.033**	**40.23**	**2.046**	**2.014**
Stddev	.007	.14	.26	.35	.008	.002	.15	.002	.009
%RSD	.3321	.3464	.6503	.8673	.4093	.0887	.3670	.1152	.4454
#1	2.002	41.34	40.03	39.87	2.044	2.032	40.15	2.047	2.024
#2	2.011	41.14	39.62	39.45	2.060	2.032	40.14	2.043	2.011
#3	2.015	41.42	40.11	40.13	2.048	2.035	40.40	2.047	2.007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.024**	**2.030**	**2.095**	**2.061**	**1.984**	**2.043**	**2.045**	**2.037**	**2.037**
Stddev	.005	.004	.002	.002	.008	.009	.002	.005	.008
%RSD	.2475	.1982	.1113	.1158	.4026	.4263	.0893	.2507	.3949
#1	2.019	2.025	2.092	2.063	1.986	2.033	2.047	2.034	2.046
#2	2.024	2.033	2.096	2.059	1.975	2.051	2.043	2.043	2.032
#3	2.029	2.031	2.097	2.063	1.990	2.044	2.044	2.034	2.032
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/16/2016 12:24:55 Type: QC
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2250.1**	**4473.0**	**37850.**	**3709.0**
Stddev	2.1	5.4	103.	19.7
%RSD	.09124	.12143	.27318	.52997
#1	2248.4	4478.3	37893.	3697.7
#2	2252.4	4473.3	37732.	3731.7
#3	2249.5	4467.4	37925.	3697.7

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/16/2016 12:29:05 Type: QC
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**.0135**	**.0005**	**.0002**	**.0002**	**.0055**	**.0001**	**.0001**	**.0000**
Stddev	.0002	.0054	.0004	.0001	.0001	.0037	.0001	.0000	.0002
%RSD	48.62	39.77	71.76	69.82	31.10	68.00	120.5	65.05	1704.
#1	.0006	.0113	.0002	.0002	.0003	.0098	.0001	.0001	-.0001
#2	.0002	.0197	.0004	.0003	.0002	.0032	.0001	.0001	.0002
#3	.0004	.0096	.0010	.0001	.0002	.0034	.0000	.0000	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0113**	**.0251**	**-.0022**	**.0001**	**.0003**	**.0163**	**.0002**	**.0000**
Stddev	.0003	.0044	.0291	.0172	.0000	.0003	.0113	.0002	.0003
%RSD	163.8	38.64	116.0	799.8	57.53	93.19	69.65	84.72	572.7
#1	-.0001	.0158	.0159	-.0217	.0001	.0006	.0088	.0000	.0002
#2	.0005	.0110	.0577	.0045	.0001	.0004	.0293	.0002	.0001
#3	.0001	.0070	.0017	.0108	.0000	.0000	.0107	.0004	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0004**	**.0017**	**.0024**	**-.0002**	**.0001**	**.0002**	**.0012**	**.0001**	**.0001**
Stddev	.0006	.0007	.0004	.0004	.0001	.0001	.0009	.0000	.0000
%RSD	131.7	41.38	17.27	182.6	38.05	78.79	73.05	9.984	56.08
#1	-.0011	.0010	.0020	-.0004	.0002	.0003	.0018	.0001	.0001
#2	-.0003	.0024	.0024	-.0004	.0001	.0001	.0015	.0001	.0000
#3	.0000	.0017	.0028	.0002	.0001	.0001	.0002	.0001	.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/16/2016 12:29:05 Type: QC
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2659.1**	**4791.0**	**40501.**	**3853.8**
Stddev	8.7	13.1	94.	11.4
%RSD	.32780	.27413	.23214	.29626
#1	2666.6	4806.1	40607.	3862.0
#2	2649.5	4782.7	40426.	3840.8
#3	2661.2	4784.1	40472.	3858.6

Zoom In Zoom Out

Sample Name: FA33739-8 Acquired: 5/16/2016 12:33:37 Type: Unk
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 50.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0115**	**.0654**	**-.0070**	**.0170**	**-.0157**	**129.9**	**-.0104**	**-.0127**	**-.0161**
Stddev	.0155	.1191	.0385	.0091	.0014	.3	.0009	.0015	.0069
%RSD	134.8	182.0	548.1	53.29	8.865	.1973	8.777	12.13	42.86
#1	.0289	.0170	.0204	.0070	-.0148	130.0	-.0113	-.0143	-.0188
#2	.0062	.2011	.0096	.0192	-.0150	130.1	-.0106	-.0125	-.0082
#3	-.0006	-.0218	-.0511	.0248	-.0173	129.6	-.0095	-.0113	-.0212

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0035**	**27.62**	**79.66**	**304.4**	**.0937**	**-.0543**	**2374.**	**-.0076**	**.0042**
Stddev	.0035	.42	1.20	1.0	.0017	.0053	9.	.0011	.0146
%RSD	101.3	1.503	1.502	.3377	1.805	9.804	.3859	15.06	344.4
#1	.0068	28.07	79.28	303.6	.0918	-.0510	2383.	-.0076	.0080
#2	.0038	27.25	81.00	305.6	.0945	-.0515	2376.	-.0065	-.0119
#3	-.0002	27.54	78.70	304.2	.0948	-.0605	2365.	-.0088	.0167

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0926**	**-.0686**	**3.654**	**-.0214**	**1.790**	**-.0412**	**.0441**	**-.0196**	**.4068**
Stddev	.0546	.0683	.015	.0122	.009	.0014	.0135	.0057	.0033
%RSD	59.02	99.54	.4191	57.06	.4820	3.476	30.64	29.10	.8233
#1	-.0777	-.0031	3.663	-.0079	1.797	-.0419	.0290	-.0217	.4106
#2	-.1531	-.1393	3.637	-.0316	1.793	-.0395	.0550	-.0131	.4043
#3	-.0469	-.0633	3.663	-.0247	1.781	-.0421	.0484	-.0239	.4056

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2514.0**	**4691.3**	**39130.**	**3846.9**
Stddev	.8	7.5	277.	5.5
%RSD	.03118	.15932	.70702	.14395
#1	2513.2	4694.3	39305.	3847.2
#2	2514.7	4696.9	38811.	3841.2
#3	2514.0	4682.8	39275.	3852.3

Zoom In Zoom Out

Sample Name: FA33895-3 Acquired: 5/16/2016 12:38:08 Type: Unk
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0003**	**1.789**	**.0007**	**.0629**	**-.0006**	**149.4**	**-.0004**	**-.0004**	**.0029**
Stddev	.0003	.011	.0019	.0003	.0001	1.0	.0001	.0002	.0004
%RSD	102.2	.6100	268.9	.4391	12.65	.6936	23.00	34.59	15.07
#1	.0006	1.776	.0000	.0632	-.0005	148.5	-.0004	-.0003	.0026
#2	.0001	1.795	.0028	.0626	-.0006	149.3	-.0005	-.0006	.0027
#3	.0001	1.794	-.0007	.0629	-.0005	150.5	-.0003	-.0004	.0034

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0246**	**2.786**	**11.84**	**81.36**	**.0866**	**-.0026**	F **367.3**	**.0005**	**.0037**
Stddev	.0005	.009	.02	.27	.0005	.0003	2.4	.0003	.0005
%RSD	2.183	.3278	.2084	.3351	.5437	11.90	.6588	63.04	13.66
#1	.0247	2.786	11.82	81.20	.0863	-.0025	369.7	.0005	.0033
#2	.0240	2.777	11.83	81.22	.0871	-.0029	367.4	.0002	.0035
#3	.0250	2.795	11.87	81.68	.0863	-.0023	364.8	.0009	.0042

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0040**	**.0039**	**6.201**	**-.0005**	F **13.73**	**.0088**	**-.0004**	**.0016**	**.1357**
Stddev	.0007	.0029	.012	.0007	.06	.0007	.0026	.0002	.0000
%RSD	17.53	75.71	.2006	136.1	.4220	7.928	665.6	11.06	.0322
#1	-.0043	.0016	6.192	.0002	13.78	.0096	-.0014	.0017	.1356
#2	-.0032	.0028	6.215	-.0012	13.74	.0086	-.0023	.0017	.1357
#3	-.0045	.0072	6.196	-.0006	13.67	.0083	.0026	.0014	.1357

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2251.5**	**4440.1**	**37333.**	**3762.9**
Stddev	6.7	8.8	240.	26.0
%RSD	.29974	.19928	.64199	.69081
#1	2244.2	4430.0	37360.	3771.1
#2	2252.7	4444.3	37081.	3783.8
#3	2257.5	4446.1	37558.	3733.8

Zoom In Zoom Out

Sample Name: FA33860-2 Acquired: 5/16/2016 12:42:50 Type: Unk
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0006**	**8.189**	**.0014**	**.0139**	**-.0017**	**116.0**	**-.0011**	**-.0008**	**.0262**
Stddev	.0011	.051	.0018	.0007	.0001	.5	.0001	.0001	.0005
%RSD	182.8	.6208	131.5	4.803	8.156	.4391	6.411	14.94	1.930
#1	-.0006	8.177	.0013	.0140	-.0019	115.5	-.0011	-.0007	.0257
#2	.0009	8.145	-.0004	.0131	-.0017	116.5	-.0011	-.0007	.0267
#3	.0015	8.244	.0033	.0145	-.0016	115.9	-.0012	-.0009	.0264

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0113**	**.2725**	**2.115**	**2.349**	**.0070**	**-.0073**	**380.7**	**.0018**	**-.0009**
Stddev	.0006	.0074	.080	.099	.0000	.0004	.8	.0005	.0022
%RSD	5.284	2.701	3.763	4.230	.3985	5.937	.2203	28.53	239.4
#1	.0111	.2675	2.153	2.441	.0069	-.0075	381.1	.0022	-.0030
#2	.0120	.2691	2.023	2.244	.0070	-.0068	381.2	.0018	-.0013
#3	.0108	.2810	2.168	2.363	.0070	-.0076	379.7	.0012	.0015

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0064**	**.0005**	**4.103**	**-.0004**	**.0805**	**.0146**	**.0015**	**.0690**	**.0452**
Stddev	.0024	.0043	.006	.0014	.0008	.0008	.0018	.0015	.0002
%RSD	37.52	815.9	.1580	395.6	1.026	5.240	122.5	2.136	.4008
#1	-.0041	.0028	4.097	-.0014	.0807	.0151	.0036	.0704	.0451
#2	-.0061	-.0044	4.102	-.0009	.0812	.0138	.0004	.0675	.0454
#3	-.0089	.0032	4.110	.0013	.0796	.0151	.0005	.0691	.0452

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2424.7**	**4621.1**	**38848.**	**3813.5**
Stddev	7.5	15.2	117.	15.6
%RSD	.30814	.32888	.30055	.41016
#1	2433.0	4638.0	38734.	3819.1
#2	2418.4	4608.6	38967.	3795.8
#3	2422.8	4616.8	38842.	3825.5

Zoom In Zoom Out

Sample Name: FA33862-2 Acquired: 5/16/2016 12:47:18 Type: Unk
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0006**	**.0565**	**-.0018**	**.0677**	**-.0019**	**303.7**	**-.0014**	**-.0015**	**-.0012**
Stddev	.0006	.0314	.0032	.0003	.0003	1.5	.0001	.0002	.0010
%RSD	102.2	55.53	177.2	.4714	14.43	.4998	9.061	14.16	80.29
#1	.0012	.0823	.0017	.0681	-.0022	302.2	-.0015	-.0016	-.0023
#2	.0003	.0216	-.0027	.0676	-.0017	305.2	-.0014	-.0016	-.0009
#3	.0002	.0655	-.0044	.0675	-.0018	303.9	-.0012	-.0012	-.0004

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0013**	**12.69**	**4.042**	**9.666**	**.2526**	**-.0069**	**256.9**	**-.0006**	**-.0015**
Stddev	.0021	.07	.061	.091	.0017	.0001	.9	.0010	.0042
%RSD	159.7	.5725	1.499	.9403	.6884	2.142	.3582	174.1	286.7
#1	.0015	12.61	4.015	9.563	.2507	-.0069	255.8	-.0007	.0029
#2	.0033	12.73	4.112	9.734	.2530	-.0071	257.6	.0005	-.0018
#3	-.0009	12.74	4.000	9.700	.2541	-.0068	257.1	-.0016	-.0054

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0077**	**-.0082**	**3.976**	**-.0012**	**.8716**	**-.0019**	**.0027**	**-.0007**	**.0421**
Stddev	.0009	.0044	.015	.0011	.0026	.0005	.0012	.0008	.0002
%RSD	11.12	52.86	.3840	89.73	.3021	27.35	44.30	107.7	.5723
#1	-.0068	-.0070	3.962	-.0014	.8702	-.0014	.0024	.0001	.0421
#2	-.0079	-.0046	3.974	-.0021	.8746	-.0017	.0017	-.0007	.0423
#3	-.0084	-.0131	3.992	.0000	.8699	-.0024	.0041	-.0015	.0418

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2422.4**	**4587.4**	**38691.**	**3783.4**
Stddev	3.3	13.2	25.	23.4
%RSD	.13580	.28842	.06561	.61903
#1	2420.6	4602.5	38663.	3800.7
#2	2420.5	4578.3	38700.	3756.7
#3	2426.2	4581.3	38712.	3792.6

Zoom In Zoom Out

Sample Name: FA33862-4 Acquired: 5/16/2016 12:51:55 Type: Unk
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0035	2.010	-.0017	.0462	-.0033	378.1	-.0025	-.0027	.0014
Stddev	.0019	.105	.0057	.0014	.0001	3.0	.0002	.0012	.0011
%RSD	55.08	5.230	334.7	3.118	3.906	.8050	7.973	44.65	75.29
#1	.0057	2.129	-.0009	.0476	-.0033	381.0	-.0025	-.0036	.0009
#2	.0023	1.930	.0035	.0462	-.0035	375.0	-.0027	-.0033	.0026
#3	.0025	1.971	-.0078	.0447	-.0032	378.3	-.0023	-.0013	.0007

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0062	13.13	9.523	14.97	.2588	-.0142	487.7	-.0006	-.0003
Stddev	.0023	.02	.139	.23	.0017	.0004	.9	.0018	.0037
%RSD	37.03	.1506	1.463	1.514	.6627	2.675	.1776	318.6	1255.
#1	.0083	13.14	9.403	14.87	.2579	-.0139	488.7	-.0004	-.0044
#2	.0067	13.14	9.490	14.80	.2576	-.0146	487.2	.0011	.0028
#3	.0037	13.11	9.675	15.22	.2607	-.0141	487.2	-.0024	.0007

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0236	.0073	3.490	-.0031	.7126	.0584	.0103	.0020	.0772
Stddev	.0046	.0149	.018	.0052	.0034	.0011	.0049	.0011	.0006
%RSD	19.45	205.6	.5103	169.1	.4750	1.824	48.03	53.57	.7645
#1	-.0253	-.0089	3.490	.0027	.7118	.0584	.0106	.0020	.0765
#2	-.0270	.0206	3.472	-.0046	.7164	.0574	.0052	.0009	.0774
#3	-.0184	.0101	3.507	-.0073	.7097	.0595	.0151	.0031	.0776

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2461.5	4628.4	38900.	3801.3
Stddev	4.1	5.8	133.	28.0
%RSD	.16708	.12518	.34183	.73543
#1	2462.5	4623.3	38845.	3786.1
#2	2457.0	4634.7	39051.	3833.6
#3	2465.0	4627.4	38803.	3784.3

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/16/2016 12:56:23 Type: QC
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2556	40.37	1.994	2.012	2.017	40.89	2.018	2.012	2.050
Stddev	.0068	1.08	.026	.056	.051	1.01	.027	.028	.059
%RSD	2.675	2.667	1.326	2.778	2.506	2.475	1.356	1.409	2.876
#1	.2531	39.18	2.025	1.951	1.960	39.82	2.049	2.045	2.026
#2	.2633	41.27	1.980	2.060	2.058	41.83	2.003	1.996	2.117
#3	.2503	40.67	1.978	2.025	2.031	41.01	2.001	1.995	2.006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.028	41.83	40.46	40.68	2.066	2.012	40.34	2.015	1.990
Stddev	.064	1.05	1.04	1.02	.060	.025	1.06	.027	.025
%RSD	3.171	2.509	2.575	2.521	2.900	1.252	2.625	1.353	1.229
#1	2.013	40.66	39.38	39.62	2.039	2.041	39.15	2.047	2.018
#2	2.098	42.69	41.46	41.67	2.135	1.998	41.19	1.999	1.981
#3	1.972	42.13	40.55	40.74	2.025	1.998	40.67	2.000	1.972
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.995	2.003	2.064	2.042	2.013	2.054	2.017	2.048	2.025
Stddev	.025	.025	.028	.026	.053	.059	.028	.052	.028
%RSD	1.234	1.233	1.332	1.272	2.656	2.879	1.403	2.549	1.379
#1	2.023	2.031	2.095	2.072	1.954	2.032	2.050	2.027	2.057
#2	1.982	1.988	2.047	2.028	2.058	2.121	2.003	2.107	2.013
#3	1.980	1.989	2.048	2.027	2.029	2.010	1.998	2.009	2.006
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/16/2016 12:56:23 Type: QC
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2266.8	4519.6	37545.	3681.4
Stddev	30.7	55.6	910.	75.8
%RSD	1.3534	1.2304	2.4247	2.0594
#1	2232.6	4455.5	37977.	3760.2
#2	2275.8	4548.8	36499.	3609.0
#3	2291.9	4554.5	38158.	3675.0

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/16/2016 13:00:34 Type: QC
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0200	-.0001	.0000	.0002	.0066	.0000	.0000	.0001
Stddev	.0003	.0053	.0007	.000	.0001	.0082	.0001	.0001	.0000
%RSD	95.63	26.26	1101.	1685.	57.39	124.5	286.3	623.6	47.47
#1	.0000	.0192	-.0002	.0000	.0003	.0141	.0001	.0001	.0001
#2	.0005	.0152	.0006	.0002	.0003	.0078	.0000	-.0001	.0001
#3	.0005	.0256	-.0007	-.0003	.0001	-.0021	.0000	.0000	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0085	-.0014	.0027	-.0001	.0002	.0037	.0001	.0001
Stddev	.0001	.0042	.0182	.0150	.0000	.0003	.0091	.0001	.0003
%RSD	63.37	49.56	1349.	563.6	61.62	144.4	244.1	70.67	323.5
#1	.0003	.0132	-.0150	.0143	.0000	.0005	.0127	.0001	.0002
#2	.0001	.0070	.0194	.0079	-.0001	.0001	-.0054	.0002	-.0003
#3	.0003	.0052	-.0084	-.0142	-.0001	.0000	.0039	.0001	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0003	.0020	.0004	.0001	.0001	.0003	-.0002	.0000
Stddev	.0001	.0021	.0004	.0007	.0002	.0001	.0012	.0001	.0001
%RSD	48.20	652.0	19.75	158.0	237.9	107.2	393.9	34.77	189.6
#1	-.0004	-.0016	.0025	.0003	.0003	.0002	.0016	-.0003	.0001
#2	-.0001	.0000	.0017	.0012	.0001	.0001	.0001	-.0001	-.0001
#3	-.0004	.0026	.0019	-.0002	-.0001	.0000	-.0008	-.0003	.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/16/2016 13:00:34 Type: QC
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2633.4**	**4741.7**	**40095.**	**3773.3**
Stddev	5.4	11.4	116.	23.9
%RSD	.20618	.23954	.28953	.63363
#1	2638.8	4750.6	40068.	3762.3
#2	2633.5	4745.5	40222.	3757.0
#3	2627.9	4728.9	39995.	3800.8

Zoom In Zoom Out

Sample Name: MP30360-MB1 Acquired: 5/16/2016 13:19:40 Type: QC
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**.0056**	**-.0030**	**-.0004**	**-.0004**	**.0190**	**-.0004**	**-.0004**	**-.0002**
Stddev	.0000	.0028	.0002	.0002	.0000	.0018	.0000	.0001	.0001
%RSD	102.4	49.99	7.986	44.20	12.79	9.474	9.063	19.20	42.32
#1	.0000	.0067	-.0033	-.0005	-.0004	.0171	-.0004	-.0004	-.0001
#2	.0000	.0024	-.0029	-.0002	-.0004	.0207	-.0004	-.0004	-.0002
#3	.0000	.0077	-.0028	-.0005	-.0003	.0192	-.0004	-.0005	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0008**	**.0001**	**-.0059**	**.0101**	**-.0001**	**-.0011**	**.0049**	**-.0001**	**.0000**
Stddev	.0002	.0013	.0188	.0101	.0000	.0002	.0034	.0003	.001
%RSD	21.30	858.6	320.0	100.1	22.46	18.02	69.98	351.3	1122.
#1	.0009	.0012	.0057	.0202	-.0001	-.0009	.0015	-.0003	.0001
#2	.0008	.0005	-.0276	.0001	-.0002	-.0013	.0048	-.0002	-.0006
#3	.0006	-.0013	.0043	.0099	-.0001	-.0011	.0083	.0002	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**.0025**	**.0149**	**.0229**	**-.0004**	**-.0007**	**-.0011**	**-.0004**	**.0009**
Stddev	.0002	.0007	.0005	.0003	.0001	.0000	.0000	.0001	.0001
%RSD	193.6	26.62	3.348	1.166	12.73	4.775	3.427	30.29	14.90
#1	-.0002	.0017	.0148	.0230	-.0004	-.0007	-.0011	-.0002	.0008
#2	.0001	.0027	.0145	.0232	-.0004	-.0007	-.0011	-.0004	.0011
#3	-.0003	.0029	.0154	.0226	-.0005	-.0007	-.0011	-.0004	.0008
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: MP30360-MB1 Acquired: 5/16/2016 13:19:40 Type: QC
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2608.7**	**4610.1**	**39325.**	**3769.2**
Stddev	5.6	11.8	177.	22.9
%RSD	.21630	.25583	.44970	.60748
#1	2610.9	4598.8	39205.	3781.1
#2	2602.3	4609.1	39241.	3742.8
#3	2613.0	4622.3	39528.	3783.6

Zoom In Zoom Out

Sample Name: MP30360-B1 Acquired: 5/16/2016 13:24:13 Type: QC
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0480**	**27.31**	**2.027**	**2.089**	**.0530**	**25.96**	**.0523**	**.5232**	**.2130**
Stddev	.0004	.14	.003	.010	.0002	.17	.0001	.0007	.0015
%RSD	.8778	.5301	.1507	.4623	.4442	.6497	.2504	.1254	.7223
#1	.0475	27.28	2.024	2.091	.0532	25.88	.0523	.5240	.2142
#2	.0484	27.46	2.030	2.097	.0532	26.15	.0521	.5230	.2113
#3	.0481	27.18	2.028	2.078	.0528	25.85	.0524	.5227	.2135
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2696**	**26.46**	**25.29**	**25.23**	**.5420**	**.5049**	**25.56**	**.5330**	**.4957**
Stddev	.0019	.21	.15	.25	.0014	.0004	.10	.0009	.0016
%RSD	.6965	.7771	.5893	1.005	.2517	.0827	.3894	.1727	.3194
#1	.2691	26.40	25.20	25.05	.5426	.5053	25.56	.5341	.4954
#2	.2681	26.69	25.46	25.52	.5404	.5050	25.66	.5325	.4942
#3	.2717	26.29	25.20	25.12	.5429	.5045	25.46	.5324	.4973
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5131**	**2.026**	**.0286**	**.5337**	**.4929**	**.5153**	**2.013**	**.4960**	**.5230**
Stddev	.0013	.002	.0009	.0006	.0023	.0018	.010	.0013	.0008
%RSD	.2537	.0980	3.187	.1133	.4571	.3399	.4797	.2700	.1464
#1	.5123	2.026	.0297	.5343	.4917	.5171	2.013	.4976	.5232
#2	.5124	2.027	.0283	.5331	.4955	.5137	2.003	.4951	.5222
#3	.5146	2.023	.0280	.5335	.4915	.5150	2.022	.4954	.5237
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: MP30360-B1 Acquired: 5/16/2016 13:24:13 Type: QC
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2356.4**	**4508.0**	**38102.**	**3711.1**
Stddev	2.8	16.6	132.	36.5
%RSD	.11772	.36888	.34758	.98340
#1	2356.1	4492.3	37971.	3730.1
#2	2353.8	4506.4	38236.	3669.0
#3	2359.3	4525.4	38099.	3734.1

Zoom In Zoom Out

Sample Name: FA33863-1 Acquired: 5/16/2016 13:28:26 Type: Unk
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0002**	**58.43**	**.0159**	**.0952**	**.0026**	**93.21**	**.0002**	**.0074**	**.0869**
Stddev	.0004	.12	.0003	.0006	.0000	.03	.0001	.0001	.0005
%RSD	180.3	.1970	1.840	.6293	1.712	.0360	43.25	1.507	.5847
#1	-.0002	58.43	.0161	.0951	.0027	93.25	.0002	.0075	.0863
#2	.0005	58.32	.0159	.0946	.0026	93.18	.0001	.0074	.0870
#3	.0003	58.55	.0156	.0958	.0026	93.21	.0001	.0073	.0873

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0711**	**33.61**	**1.404**	**4.315**	**.0899**	**.0015**	**.4686**	**.0175**	**.0790**
Stddev	.0003	.04	.028	.026	.0001	.0001	.0100	.0003	.0003
%RSD	.3662	.1202	2.026	.6031	.1102	4.864	2.130	1.821	.3830
#1	.0711	33.61	1.380	4.314	.0898	.0015	.4798	.0178	.0789
#2	.0709	33.56	1.435	4.342	.0900	.0015	.4607	.0172	.0788
#3	.0714	33.64	1.398	4.290	.0899	.0014	.4653	.0174	.0793

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0009**	**.0001**	**1.595**	**.0174**	**.4242**	**.0985**	**-.0028**	**.0879**	**.1035**
Stddev	.0005	.0017	.015	.0001	.0015	.0000	.0005	.0003	.0008
%RSD	52.26	1630.	.9632	.2999	.3486	.0325	18.30	.3635	.8118
#1	-.0008	-.0015	1.613	.0175	.4231	.0984	-.0026	.0875	.1045
#2	-.0005	.0000	1.583	.0174	.4236	.0985	-.0024	.0880	.1029
#3	-.0014	.0019	1.590	.0174	.4259	.0985	-.0034	.0882	.1033

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2380.7**	**4925.6**	**40516.**	**3877.2**
Stddev	25.8	45.0	146.	7.9
%RSD	1.0821	.91315	.35968	.20378
#1	2351.0	4873.7	40642.	3868.1
#2	2394.1	4951.2	40549.	3882.0
#3	2396.9	4951.9	40356.	3881.5

Zoom In Zoom Out

Sample Name: MP30360-D1 Acquired: 5/16/2016 13:32:48 Type: Unk
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0001**	**62.59**	**.0165**	**.0904**	**.0024**	**131.9**	**.0003**	**.0076**	**.0854**
Stddev	.0001	.36	.0011	.0003	.0000	1.1	.0000	.0001	.0003
%RSD	196.6	.5753	6.495	.2922	1.761	.8476	5.771	1.727	.3909
#1	.0000	62.19	.0154	.0902	.0024	130.6	.0003	.0077	.0851
#2	-.0002	62.70	.0176	.0907	.0025	132.2	.0003	.0077	.0857
#3	.0000	62.89	.0166	.0903	.0024	132.8	.0003	.0075	.0854

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0682**	**36.92**	**1.408**	**4.762**	**.0990**	**.0019**	**.6325**	**.0194**	**.0724**
Stddev	.0002	.20	.017	.023	.0003	.0001	.0056	.0002	.0008
%RSD	.2497	.5451	1.220	.4809	.3128	5.183	.8855	1.030	1.066
#1	.0684	36.69	1.388	4.746	.0992	.0020	.6265	.0194	.0723
#2	.0681	37.02	1.419	4.751	.0992	.0018	.6376	.0192	.0731
#3	.0681	37.05	1.417	4.788	.0986	.0019	.6334	.0196	.0716

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0022**	**.0022**	**1.991**	**.0179**	**.4916**	**.1161**	**-.0027**	**.0941**	**.1014**
Stddev	.0006	.0009	.002	.0001	.0022	.0005	.0005	.0006	.0004
%RSD	27.01	41.14	.1139	.5190	.4555	.4243	17.73	.6769	.4099
#1	-.0017	.0032	1.988	.0180	.4890	.1165	-.0026	.0944	.1019
#2	-.0021	.0018	1.992	.0178	.4929	.1163	-.0022	.0945	.1011
#3	-.0029	.0015	1.992	.0179	.4929	.1156	-.0032	.0933	.1012

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2356.1**	**4918.9**	**41348.**	**3927.3**
Stddev	3.6	7.9	116.	42.3
%RSD	.15341	.15974	.28098	1.0778
#1	2354.0	4912.8	41291.	3973.4
#2	2360.3	4916.1	41271.	3918.4
#3	2354.1	4927.8	41481.	3890.1

Zoom In Zoom Out

Sample Name: MP30360-SD1 Acquired: 5/16/2016 13:37:08 Type: Unk
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0008**	**68.60**	**.0208**	**.1100**	**.0016**	**110.2**	**-.0006**	**.0079**	**.1039**
Stddev	.0016	.24	.0026	.0027	.0003	.3	.0001	.0004	.0015
%RSD	207.7	.3525	12.34	2.483	17.13	.2516	23.48	5.357	1.427
#1	.0007	68.40	.0213	.1106	.0015	109.9	-.0006	.0083	.1022
#2	-.0008	68.52	.0231	.1070	.0019	110.4	-.0004	.0078	.1046
#3	.0024	68.87	.0180	.1123	.0013	110.2	-.0007	.0075	.1048

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0865**	**39.83**	**1.535**	**5.138**	**.1067**	**-.0050**	**.5605**	**.0210**	**.0921**
Stddev	.0009	.20	.070	.044	.0003	.0003	.0344	.0005	.0021
%RSD	1.080	.5106	4.565	.8565	.3212	6.153	6.140	2.159	2.234
#1	.0856	39.63	1.615	5.139	.1071	-.0054	.5208	.0215	.0908
#2	.0874	39.82	1.497	5.094	.1066	-.0049	.5813	.0209	.0910
#3	.0864	40.03	1.491	5.182	.1064	-.0049	.5795	.0206	.0944

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0092**	**-.0011**	**1.982**	**.0198**	**.4976**	**.1134**	**-.0030**	**.1020**	**.1659**
Stddev	.0031	.0047	.007	.0019	.0010	.0005	.0032	.0002	.0014
%RSD	33.86	423.8	.3450	9.722	.1960	.4331	106.8	.1902	.8535
#1	-.0111	.0019	1.982	.0220	.4979	.1137	-.0050	.1018	.1654
#2	-.0056	.0012	1.975	.0183	.4965	.1129	-.0046	.1022	.1649
#3	-.0109	-.0065	1.989	.0191	.4983	.1137	.0007	.1021	.1675

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2518.6**	**4735.6**	**39899.**	**3797.5**
Stddev	9.5	10.5	189.	26.1
%RSD	.37898	.22084	.47285	.68693
#1	2527.2	4744.5	40035.	3827.6
#2	2520.5	4738.3	39980.	3782.5
#3	2508.3	4724.1	39684.	3782.3

Zoom In Zoom Out

Sample Name: MP30360-PS1 Acquired: 5/16/2016 13:41:34 Type: Unk
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0465**	**59.42**	**.1139**	**.3476**	**.0536**	**95.40**	**.0486**	**.0558**	**.1366**
Stddev	.0005	.28	.0027	.0026	.0005	.29	.0008	.0007	.0008
%RSD	1.095	.4689	2.389	.7620	.9197	.2993	1.643	1.287	.6211
#1	.0459	59.11	.1170	.3455	.0531	95.08	.0496	.0566	.1370
#2	.0468	59.55	.1126	.3469	.0537	95.50	.0480	.0553	.1371
#3	.0468	59.62	.1120	.3506	.0541	95.62	.0483	.0554	.1356

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.1745**	**35.63**	**11.06**	**9.037**	**.1399**	**.0951**	**10.39**	**.1141**	**.1278**
Stddev	.0015	.16	.11	.063	.0004	.0015	.05	.0020	.0032
%RSD	.8493	.4517	.9728	.6939	.3201	1.586	.4881	1.795	2.539
#1	.1753	35.44	10.94	8.965	.1400	.0969	10.34	.1165	.1316
#2	.1728	35.75	11.15	9.077	.1403	.0943	10.39	.1128	.1263
#3	.1754	35.68	11.10	9.069	.1394	.0942	10.44	.1130	.1256

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0995**	**.0957**	**1.592**	**.0629**	**.4616**	**.1959**	**.0978**	**.1340**	**.3492**
Stddev	.0020	.0030	.024	.0010	.0037	.0004	.0022	.0002	.0053
%RSD	2.050	3.133	1.510	1.612	.8010	.2136	2.236	.1440	1.526
#1	.1016	.0991	1.619	.0640	.4574	.1962	.1002	.1340	.3553
#2	.0975	.0937	1.576	.0626	.4629	.1961	.0959	.1339	.3463
#3	.0993	.0942	1.580	.0621	.4645	.1955	.0975	.1342	.3459

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2348.2**	**4875.0**	**40123.**	**3908.2**
Stddev	30.6	63.8	152.	14.9
%RSD	1.3039	1.3082	.37921	.38176
#1	2312.9	4801.4	40156.	3923.8
#2	2366.1	4912.4	39957.	3906.9
#3	2365.8	4911.2	40256.	3894.0

Zoom In Zoom Out

Sample Name: MP30360-S1 Acquired: 5/16/2016 13:45:52 Type: Unk
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0453**	**124.2**	**1.822**	**2.062**	**.0529**	**146.3**	**.0468**	**.4701**	**.3134**
Stddev	.0004	.6	.004	.013	.0001	.3	.0001	.0002	.0012
%RSD	.8670	.4459	.2448	.6195	.2519	.1795	.1118	.0423	.3858
#1	.0450	123.8	1.822	2.051	.0528	146.3	.0468	.4699	.3130
#2	.0457	124.8	1.818	2.076	.0531	146.6	.0468	.4703	.3148
#3	.0452	123.9	1.827	2.060	.0529	146.0	.0467	.4701	.3125

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.3196**	**69.39**	**25.47**	**29.10**	**.5859**	**.4019**	**24.65**	**.4964**	**.5709**
Stddev	.0025	.25	.21	.07	.0010	.0005	.09	.0005	.0016
%RSD	.7803	.3580	.8299	.2346	.1687	.1347	.3599	.0937	.2852
#1	.3172	69.20	25.44	29.15	.5868	.4013	24.56	.4970	.5698
#2	.3193	69.67	25.70	29.12	.5861	.4020	24.74	.4961	.5702
#3	.3222	69.29	25.28	29.02	.5849	.4023	24.64	.4962	.5728

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.1167**	**1.824**	**2.065**	**.4545**	**.9328**	**.2947**	**1.928**	**.5636**	**.5709**
Stddev	.0015	.002	.000	.0001	.0050	.0006	.004	.0006	.0006
%RSD	1.255	.1013	.0204	.0283	.5335	.2069	.1796	.1031	.1129
#1	.1151	1.826	2.066	.4547	.9298	.2949	1.932	.5642	.5712
#2	.1169	1.822	2.065	.4545	.9385	.2952	1.925	.5636	.5713
#3	.1180	1.824	2.065	.4545	.9300	.2941	1.927	.5631	.5701

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2240.1**	**4816.0**	**40389.**	**3963.7**
Stddev	3.4	7.1	37.	21.2
%RSD	.14957	.14828	.09192	.53498
#1	2243.2	4824.2	40431.	3959.0
#2	2240.6	4810.8	40362.	3945.2
#3	2236.6	4813.2	40373.	3986.8

Zoom In Zoom Out

Sample Name: MP30360-S2 Acquired: 5/16/2016 13:50:04 Type: Unk
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0464**	**126.1**	**1.838**	**2.082**	**.0536**	**171.7**	**.0469**	**.4725**	**.3086**
Stddev	.0003	.3	.005	.006	.0001	.5	.0001	.0011	.0026
%RSD	.6064	.2477	.2518	.2709	.2257	.2939	.1778	.2405	.8425
#1	.0462	126.5	1.841	2.089	.0536	171.6	.0470	.4737	.3113
#2	.0463	126.0	1.839	2.078	.0537	172.2	.0469	.4722	.3085
#3	.0467	125.9	1.832	2.080	.0535	171.1	.0470	.4715	.3061

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.3195**	**71.52**	**25.69**	**29.07**	**.6424**	**.4097**	**25.23**	**.4990**	**.5679**
Stddev	.0005	.12	.09	.05	.0036	.0009	.07	.0013	.0019
%RSD	.1571	.1689	.3361	.1800	.5640	.2173	.2699	.2654	.3287
#1	.3192	71.59	25.78	29.09	.6466	.4107	25.31	.5005	.5700
#2	.3192	71.60	25.69	29.10	.6404	.4090	25.19	.4983	.5671
#3	.3201	71.38	25.61	29.01	.6403	.4093	25.19	.4982	.5666

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.1236**	**1.838**	**2.374**	**.4549**	**.9952**	**.3403**	**1.946**	**.5695**	**.5683**
Stddev	.0010	.006	.002	.0018	.0033	.0017	.003	.0013	.0018
%RSD	.7708	.3095	.0993	.3886	.3366	.4931	.1530	.2251	.3225
#1	.1230	1.840	2.373	.4567	.9984	.3422	1.947	.5709	.5694
#2	.1247	1.843	2.371	.4548	.9917	.3397	1.943	.5692	.5693
#3	.1230	1.832	2.376	.4532	.9955	.3391	1.949	.5684	.5662

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2200.6**	**4732.5**	**39759.**	**3869.8**
Stddev	4.2	10.7	172.	5.1
%RSD	.18989	.22619	.43221	.13208
#1	2197.3	4720.3	39582.	3867.1
#2	2205.3	4740.3	39770.	3866.6
#3	2199.2	4736.9	39926.	3875.7

Zoom In Zoom Out

Sample Name: FA33863-2 Acquired: 5/16/2016 13:54:15 Type: Unk
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0004**	**107.8**	**.0212**	**.1186**	**.0035**	**17.78**	**.0000**	**.0087**	**.1510**
Stddev	.0002	.3	.0002	.0003	.0001	.12	.0001	.0001	.0012
%RSD	63.90	.3072	1.144	.2164	1.600	.6739	473.5	.5850	.7759
#1	.0002	107.7	.0212	.1185	.0035	17.66	.0001	.0087	.1516
#2	.0003	108.2	.0210	.1189	.0035	17.89	.0000	.0087	.1497
#3	.0006	107.6	.0214	.1185	.0034	17.80	.0000	.0088	.1518

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0743**	**74.48**	**2.206**	**13.02**	**.1349**	**.0019**	**4.269**	**.0271**	**.0589**
Stddev	.0006	.28	.014	.12	.0005	.0000	.015	.0003	.0001
%RSD	.8437	.3808	.6174	.9209	.3772	1.889	.3424	.9538	.2115
#1	.0749	74.19	2.192	12.88	.1350	.0019	4.263	.0274	.0589
#2	.0737	74.76	2.208	13.10	.1343	.0019	4.285	.0269	.0589
#3	.0742	74.48	2.219	13.07	.1353	.0018	4.258	.0270	.0591

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0012**	**.0020**	**2.771**	**.0191**	**1.883**	**.1357**	**-.0020**	**.1576**	**.1373**
Stddev	.0017	.0004	.009	.0004	.006	.0005	.0013	.0007	.0006
%RSD	142.8	21.71	.3073	2.061	.2953	.3440	63.85	.4264	.4273
#1	-.0004	.0024	2.779	.0189	1.883	.1358	-.0022	.1570	.1368
#2	.0000	.0018	2.762	.0190	1.888	.1352	-.0007	.1576	.1380
#3	-.0031	.0016	2.772	.0196	1.877	.1362	-.0032	.1583	.1371

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2419.9**	**5044.6**	**42167.**	**4043.6**
Stddev	7.1	10.1	77.	34.1
%RSD	.29307	.20046	.18187	.84389
#1	2428.1	5043.1	42132.	4081.5
#2	2416.3	5055.5	42255.	4015.3
#3	2415.3	5035.4	42114.	4034.1

Zoom In Zoom Out

Sample Name: FA33863-3 Acquired: 5/16/2016 13:58:34 Type: Unk
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0014	58.82	.1254	.2232	.0013	118.3	.0029	.0066	.1523
Stddev	.0001	.09	.0003	.0006	.0001	.3	.0001	.0000	.0005
%RSD	10.57	.1447	.2324	.2468	6.070	.2767	1.733	.6904	.3602
#1	.0012	58.73	.1251	.2233	.0014	118.0	.0030	.0066	.1517
#2	.0015	58.83	.1255	.2227	.0012	118.3	.0029	.0066	.1527
#3	.0015	58.90	.1256	.2238	.0013	118.6	.0029	.0067	.1525

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	2.204	45.33	1.809	6.561	1.034	.0020	3.347	.0277	.3898
Stddev	.016	.21	.028	.021	.004	.0001	.008	.0001	.0011
%RSD	.7109	.4614	1.571	.3184	.3439	4.876	.2443	.3592	.2722
#1	2.222	45.17	1.778	6.580	1.030	.0021	3.346	.0276	.3902
#2	2.194	45.26	1.834	6.539	1.037	.0020	3.355	.0276	.3905
#3	2.195	45.57	1.816	6.565	1.034	.0019	3.338	.0278	.3885

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0019	.0034	2.391	.0260	1.648	.2231	-.0018	.0719	2.113
Stddev	.0008	.0026	.003	.0004	.004	.0005	.0017	.0004	.005
%RSD	42.02	77.37	.1153	1.489	.2375	.2096	98.16	.5782	.2298
#1	-.0021	.0004	2.392	.0265	1.644	.2229	-.0024	.0715	2.111
#2	-.0025	.0047	2.393	.0257	1.649	.2237	-.0030	.0723	2.109
#3	-.0010	.0051	2.388	.0259	1.651	.2228	.0002	.0719	2.118

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2356.6	4837.5	41049.	4003.0
Stddev	6.5	7.0	78.	19.1
%RSD	.27432	.14567	.18993	.47643
#1	2352.2	4830.8	41138.	4025.0
#2	2353.5	4836.6	41010.	3990.5
#3	2364.0	4844.9	40998.	3993.7

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/16/2016 14:02:53 Type: QC
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2588	40.94	2.072	2.039	2.056	41.32	2.090	2.079	2.081
Stddev	.0011	.28	.006	.009	.014	.30	.003	.004	.006
%RSD	.4244	.6815	.2784	.4279	.6560	.7157	.1479	.1899	.2944
#1	.2598	41.24	2.065	2.048	2.067	41.59	2.089	2.077	2.085
#2	.2576	40.69	2.074	2.031	2.041	41.00	2.094	2.083	2.084
#3	.2589	40.89	2.076	2.038	2.059	41.36	2.088	2.076	2.074
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.064	42.55	40.80	41.11	2.107	2.079	41.14	2.097	2.060
Stddev	.013	.28	.27	.34	.003	.004	.20	.004	.001
%RSD	.6241	.6489	.6678	.8158	.1391	.1958	.4902	.1777	.0690
#1	2.073	42.79	41.07	41.33	2.111	2.075	41.37	2.094	2.059
#2	2.049	42.25	40.52	40.72	2.105	2.083	40.99	2.101	2.061
#3	2.069	42.62	40.81	41.27	2.106	2.079	41.06	2.095	2.061
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.070	2.075	2.136	2.111	2.039	2.098	2.082	2.088	2.094
Stddev	.005	.001	.005	.002	.009	.007	.002	.006	.001
%RSD	.2649	.0592	.2352	.0891	.4654	.3308	.0953	.2751	.0283
#1	2.071	2.076	2.134	2.111	2.050	2.105	2.081	2.090	2.094
#2	2.076	2.075	2.142	2.112	2.032	2.091	2.084	2.093	2.093
#3	2.065	2.074	2.132	2.109	2.036	2.098	2.081	2.082	2.094
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/16/2016 14:02:53 Type: QC
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2234.8	4439.8	37397.	3682.6
Stddev	5.4	11.0	136.	23.2
%RSD	.24129	.24874	.36332	.62971
#1	2241.0	4451.0	37293.	3664.7
#2	2231.7	4429.0	37347.	3708.8
#3	2231.6	4439.5	37551.	3674.3

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/16/2016 14:07:04 Type: QC
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0085	-.0002	-.0001	.0001	.0035	.0000	.0000	.0000
Stddev	.0004	.0061	.0004	.0002	.0001	.0033	.000	.000	.0000
%RSD	255.1	71.72	174.0	174.3	151.2	93.21	252.6	147.4	190.0
#1	-.0001	.0037	-.0004	-.0003	.0001	.0072	.0000	.0000	.0000
#2	-.0001	.0064	-.0006	-.0003	.0001	.0012	.0000	.0000	.0001
#3	.0006	.0153	.0002	.0001	.0000	.0021	-.0001	-.0001	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0013	-.0086	.0102	-.0001	.0000	-.0064	.0001	-.0002
Stddev	.0001	.0070	.0127	.0233	.0000	.0004	.0060	.0001	.0003
%RSD	26.49	520.4	147.6	229.5	31.40	944.2	93.80	131.4	149.6
#1	.0005	.0011	-.0068	-.0026	-.0001	.0004	-.0062	.0002	-.0001
#2	.0004	.0085	-.0221	.0371	-.0001	.0001	-.0125	.0000	-.0005
#3	.0003	-.0055	.0031	-.0040	-.0002	-.0004	-.0005	.0001	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0005	.0025	-.0004	-.0001	-.0004	.0003	-.0001	.0000
Stddev	.0004	.0006	.0003	.0002	.0001	.0001	.0004	.0001	.0001
%RSD	189.9	104.7	10.75	54.41	94.54	15.82	149.1	58.51	2870.
#1	.0002	.0011	.0029	-.0005	-.0001	-.0004	-.0001	-.0002	.0000
#2	-.0002	.0000	.0024	-.0001	.0000	-.0004	.0007	.0000	.0000
#3	-.0006	.0005	.0024	-.0005	-.0002	-.0005	.0002	-.0001	.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/16/2016 14:07:04 Type: QC
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2610.9**	**4677.0**	**39683.**	**3749.6**
Stddev	4.6	4.1	216.	23.9
%RSD	.17790	.08799	.54317	.63667
#1	2614.2	4680.8	39891.	3732.0
#2	2605.6	4672.6	39461.	3776.8
#3	2612.9	4677.6	39695.	3740.0

Zoom In Zoom Out

Sample Name: FA33863-4 Acquired: 5/16/2016 14:11:35 Type: Unk
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0010**	**25.05**	**.0041**	**.0752**	**.0009**	**134.2**	**.0006**	**.0019**	**.0475**
Stddev	.0003	.10	.0009	.0003	.0001	.3	.0000	.0001	.0002
%RSD	26.37	.4006	21.94	.4373	7.321	.2171	7.958	5.335	.5131
#1	.0007	24.98	.0038	.0754	.0009	134.4	.0006	.0019	.0478
#2	.0012	25.16	.0051	.0754	.0010	134.4	.0005	.0021	.0474
#3	.0009	25.00	.0034	.0748	.0010	133.9	.0006	.0019	.0474

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.4052**	**19.52**	**1.568**	**4.860**	**.0994**	**-.0002**	**3.421**	**.0167**	**.0718**
Stddev	.0029	.03	.024	.042	.0003	.0001	.010	.0002	.0009
%RSD	.7142	.1741	1.545	.8674	.3349	59.38	.2940	.9504	1.262
#1	.4021	19.50	1.566	4.842	.0996	-.0001	3.411	.0168	.0718
#2	.4054	19.56	1.593	4.908	.0991	-.0001	3.420	.0169	.0709
#3	.4079	19.49	1.545	4.830	.0996	-.0003	3.432	.0165	.0728

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0012**	**.0027**	**2.323**	**.0184**	**1.197**	**.1240**	**-.0020**	**.0420**	**.4311**
Stddev	.0007	.0035	.001	.0003	.005	.0000	.0004	.0002	.0013
%RSD	64.25	132.2	.0385	1.743	.4111	.0344	21.43	.4736	.3089
#1	-.0003	.0063	2.323	.0182	1.194	.1240	-.0022	.0418	.4325
#2	-.0018	-.0007	2.324	.0182	1.203	.1240	-.0015	.0421	.4299
#3	-.0013	.0024	2.324	.0188	1.195	.1241	-.0023	.0420	.4308

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2360.6**	**4727.5**	**40069.**	**3826.7**
Stddev	2.0	11.4	121.	20.7
%RSD	.08359	.24153	.30201	.54009
#1	2358.4	4716.2	39940.	3812.0
#2	2361.3	4727.0	40180.	3817.7
#3	2362.2	4739.1	40087.	3850.3

Zoom In Zoom Out

Sample Name: FA32007-25W Acquired: 5/16/2016 14:15:57 Type: Unk
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0033**	**22.50**	**.0220**	**1.840**	**.0014**	F **1918.**	**.0047**	**.0047**	**.0763**
Stddev	.0003	.13	.0011	.003	.0001	16.	.0000	.0003	.0010
%RSD	7.828	.5709	4.879	.1817	5.594	.8436	.8122	5.960	1.325
#1	.0034	22.63	.0222	1.844	.0015	1932.	.0047	.0044	.0773
#2	.0034	22.50	.0231	1.839	.0013	1923.	.0046	.0049	.0763
#3	.0030	22.37	.0209	1.837	.0013	1900.	.0047	.0049	.0753

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**2.320**	**29.70**	**1.015**	**9.937**	**.3611**	**.0021**	**17.99**	**.0170**	**.1637**
Stddev	.009	.16	.046	.076	.0031	.0001	.03	.0002	.0012
%RSD	.3762	.5301	4.562	.7661	.8456	2.918	.1388	1.267	.7060
#1	2.319	29.87	.9623	10.000	.3646	.0022	18.02	.0172	.1646
#2	2.330	29.69	1.036	9.958	.3595	.0021	17.99	.0171	.1640
#3	2.312	29.56	1.047	9.852	.3592	.0021	17.97	.0168	.1624

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0044**	**.0126**	**1.868**	**.0192**	F **11.89**	**.9585**	**.0012**	**.0491**	**.5094**
Stddev	.0005	.0035	.003	.0002	.06	.0069	.0015	.0008	.0010
%RSD	12.19	28.02	.1492	1.212	.4682	.7165	128.1	1.633	.2046
#1	-.0039	.0162	1.866	.0192	11.88	.9661	.0029	.0497	.5082
#2	-.0043	.0125	1.872	.0195	11.95	.9566	-.0001	.0493	.5103
#3	-.0050	.0092	1.868	.0191	11.84	.9528	.0008	.0482	.5095

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1787.4**	**4194.3**	**35543.**	**3813.7**
Stddev	5.9	.9	217.	28.2
%RSD	.33162	.02124	.61100	.74047
#1	1784.0	4194.0	35299.	3781.5
#2	1794.3	4195.2	35614.	3825.2
#3	1784.0	4193.5	35715.	3834.3

Zoom In Zoom Out

Sample Name: FA32007-33W Acquired: 5/16/2016 14:20:34 Type: Unk
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0003**	**13.33**	**.0221**	**.1660**	**.0007**	F **1741.**	**.0005**	**.0032**	**.0595**
Stddev	.0001	.07	.0018	.0004	.0001	10.	.0001	.0001	.0006
%RSD	52.90	.5151	8.264	.2705	10.11	.5692	14.34	4.021	.9427
#1	.0001	13.33	.0231	.1657	.0007	1743.	.0005	.0032	.0593
#2	.0004	13.40	.0233	.1657	.0006	1749.	.0005	.0034	.0590
#3	.0002	13.27	.0200	.1665	.0008	1730.	.0006	.0031	.0601

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.1197**	**23.14**	**.6713**	**6.622**	**.3831**	**.0019**	**18.28**	**.0109**	**.0621**
Stddev	.0004	.08	.0666	.037	.0019	.0001	.03	.0002	.0006
%RSD	.3045	.3282	9.916	.5574	.5035	7.445	.1776	1.677	.9616
#1	.1199	23.18	.5945	6.629	.3810	.0018	18.32	.0111	.0614
#2	.1193	23.18	.7109	6.655	.3835	.0020	18.26	.0110	.0624
#3	.1199	23.05	.7086	6.583	.3848	.0017	18.26	.0107	.0625

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0042**	**.0121**	**1.881**	**.0160**	F **10.08**	**.1419**	**.0023**	**.0452**	**.0823**
Stddev	.0021	.0013	.003	.0002	.15	.0004	.0022	.0004	.0002
%RSD	49.37	10.49	.1831	1.236	1.533	.2956	96.86	.9476	.1924
#1	-.0058	.0135	1.885	.0159	10.00	.1416	.0003	.0456	.0821
#2	-.0051	.0111	1.880	.0158	10.26	.1424	.0047	.0447	.0824
#3	-.0019	.0116	1.878	.0162	9.986	.1418	.0019	.0451	.0823

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1813.0**	**4280.3**	**36149.**	**3861.6**
Stddev	4.8	13.2	29.	12.0
%RSD	.26541	.30732	.07968	.30954
#1	1808.8	4265.2	36133.	3864.7
#2	1818.3	4287.6	36132.	3848.3
#3	1812.0	4288.3	36182.	3871.6

SGS ACCUTEST FA33720

Zoom In Zoom Out

Sample Name: FA33868-11 Acquired: 5/16/2016 14:25:12 Type: Unk
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0001**	**20.84**	**.0027**	**.0448**	**.0004**	**16.58**	**-.0001**	**.0065**	**.0264**
Stddev	.0002	.11	.0005	.0006	.0000	.08	.0000	.0000	.0001
%RSD	371.2	.5495	18.57	1.303	5.439	.4921	24.93	.5308	.5598
#1	.0002	20.82	.0023	.0442	.0004	16.54	-.0001	.0064	.0263
#2	-.0002	20.73	.0026	.0450	.0004	16.53	-.0002	.0065	.0266
#3	-.0002	20.96	.0033	.0453	.0004	16.67	-.0001	.0065	.0263

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0075**	**8.353**	**.3563**	**.7450**	**.0169**	**.0001**	**.1605**	**.0084**	**.0457**
Stddev	.0003	.053	.0096	.0235	.0002	.0001	.0065	.0001	.0001
%RSD	3.365	.6379	2.688	3.156	1.162	70.85	4.076	.7025	.3200
#1	.0074	8.365	.3462	.7345	.0167	.0001	.1662	.0083	.0456
#2	.0078	8.295	.3576	.7720	.0171	.0001	.1534	.0084	.0459
#3	.0073	8.399	.3652	.7286	.0168	.0002	.1618	.0085	.0457

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0004**	**.0024**	**1.366**	**.0168**	**.1062**	**.1329**	**-.0024**	**.0306**	**.0239**
Stddev	.0003	.0009	.005	.0001	.0008	.0006	.0007	.0002	.0002
%RSD	61.46	38.23	.3733	.7348	.7706	.4304	27.52	.8011	.7586
#1	-.0007	.0034	1.362	.0170	.1058	.1333	-.0025	.0307	.0237
#2	-.0002	.0017	1.372	.0168	.1056	.1332	-.0017	.0307	.0241
#3	-.0004	.0019	1.365	.0167	.1071	.1322	-.0030	.0303	.0238

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2506.7**	**4763.6**	**40421.**	**3832.3**
Stddev	8.6	6.4	464.	17.4
%RSD	.34421	.13427	1.1473	.45329
#1	2499.2	4769.2	40367.	3827.5
#2	2516.1	4764.9	39987.	3851.6
#3	2504.8	4756.6	40910.	3817.9

Zoom In Zoom Out

Sample Name: FA33950-1 Acquired: 5/16/2016 14:29:36 Type: Unk
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0000**	**18.05**	**.0036**	**.0240**	**-.0001**	**12.65**	**-.0002**	**.0004**	**.0212**
Stddev	.000	.05	.0006	.0001	.0001	.03	.0000	.0001	.0001
%RSD	629.9	.2808	15.73	.3005	61.30	.2339	10.59	18.37	.7004
#1	-.0004	18.03	.0040	.0240	.0000	12.62	-.0002	.0004	.0210
#2	.0002	18.00	.0038	.0241	-.0001	12.68	-.0002	.0003	.0213
#3	.0000	18.10	.0029	.0240	-.0002	12.65	-.0002	.0005	.0212

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0056**	**6.869**	**.2862**	**.5624**	**.0489**	**-.0001**	**.1036**	**.0047**	**.0291**
Stddev	.0001	.029	.0144	.0370	.0002	.0001	.0017	.0002	.0007
%RSD	2.223	.4228	5.031	6.582	.4251	41.52	1.655	3.473	2.578
#1	.0055	6.838	.2770	.5209	.0488	-.0002	.1017	.0048	.0300
#2	.0057	6.874	.2788	.5743	.0488	-.0001	.1049	.0048	.0286
#3	.0055	6.895	.3028	.5920	.0491	-.0001	.1043	.0045	.0288

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0011**	**.0009**	**1.653**	**.0161**	**.0925**	**.3600**	**-.0020**	**.0257**	**.0467**
Stddev	.0006	.0010	.001	.0002	.0001	.0004	.0003	.0001	.0002
%RSD	50.53	105.9	.0623	1.491	.1328	.1183	15.50	.3148	.3614
#1	-.0006	.0007	1.653	.0160	.0925	.3595	-.0022	.0257	.0465
#2	-.0017	.0019	1.651	.0159	.0923	.3604	-.0022	.0256	.0467
#3	-.0010	.0000	1.653	.0163	.0926	.3602	-.0017	.0258	.0468

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2540.6**	**4762.5**	**40562.**	**3830.2**
Stddev	7.3	10.3	124.	13.0
%RSD	.28796	.21728	.30468	.33906
#1	2547.3	4774.4	40570.	3837.5
#2	2532.8	4755.8	40681.	3815.2
#3	2541.8	4757.2	40434.	3838.0

Zoom In Zoom Out

Sample Name: FA33950-2 Acquired: 5/16/2016 14:34:02 Type: Unk
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0012**	**79.38**	**.0198**	**.8539**	**.0027**	**23.14**	**.0010**	**.0113**	**.1058**
Stddev	.0002	.31	.0004	.0028	.0001	.07	.0001	.0001	.0001
%RSD	18.19	.3902	2.157	.3322	1.972	.2981	9.917	.8333	.1249
#1	.0013	79.38	.0194	.8520	.0028	23.17	.0009	.0112	.1057
#2	.0009	79.69	.0202	.8572	.0028	23.19	.0010	.0113	.1057
#3	.0013	79.07	.0199	.8526	.0027	23.06	.0011	.0114	.1059

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.1870**	**55.82**	**3.553**	**2.970**	**.1815**	**.0035**	**.3423**	**.0427**	**.6026**
Stddev	.0015	.17	.030	.029	.0013	.0001	.0008	.0002	.0024
%RSD	.8266	.3109	.8554	.9599	.6922	3.157	.2357	.4620	.3904
#1	.1879	55.81	3.556	2.966	.1804	.0035	.3418	.0425	.6007
#2	.1852	56.00	3.582	3.000	.1813	.0034	.3419	.0429	.6019
#3	.1879	55.66	3.522	2.944	.1829	.0036	.3432	.0426	.6052

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0001**	**.0045**	**2.059**	**.0390**	**.4570**	**.6853**	**-.0016**	**.0932**	**.3785**
Stddev	.0013	.0014	.002	.0005	.0013	.0016	.0009	.0003	.0010
%RSD	1256.	30.82	.0819	1.235	.2757	.2398	56.78	.3414	.2571
#1	.0015	.0061	2.057	.0395	.4563	.6847	-.0025	.0928	.3780
#2	-.0012	.0034	2.061	.0388	.4585	.6842	-.0007	.0934	.3796
#3	.0001	.0040	2.059	.0385	.4563	.6872	-.0016	.0933	.3778

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2445.4**	**5042.4**	**42651.**	**4089.7**
Stddev	.5	3.1	70.	19.3
%RSD	.02172	.06106	.16343	.47135
#1	2445.2	5040.9	42731.	4079.7
#2	2446.0	5040.4	42605.	4077.5
#3	2445.0	5046.0	42616.	4111.9

Zoom In Zoom Out

Sample Name: FA33950-3 Acquired: 5/16/2016 14:38:23 Type: Unk
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0010**	**50.78**	**.1542**	**1.101**	**.0082**	**70.54**	**.0050**	**.0592**	**.2607**
Stddev	.0001	.32	.0012	.005	.0001	.06	.0000	.0002	.0007
%RSD	5.201	.6318	.8093	.4806	.9703	.0908	.9085	.3001	.2788
#1	.0010	50.90	.1555	1.105	.0082	70.51	.0050	.0593	.2608
#2	.0010	51.02	.1530	1.104	.0083	70.62	.0050	.0593	.2614
#3	.0011	50.42	.1540	1.095	.0081	70.50	.0049	.0590	.2599

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**1.106**	**236.2**	**5.538**	**6.740**	**1.676**	**.0301**	**1.439**	**.1685**	**.8126**
Stddev	.002	1.0	.018	.034	.004	.0000	.015	.0004	.0010
%RSD	.1640	.4034	.3318	.5071	.2477	.1484	1.038	.2617	.1197
#1	1.104	236.4	5.554	6.707	1.678	.0300	1.446	.1688	.8138
#2	1.108	237.0	5.518	6.775	1.678	.0300	1.449	.1686	.8120
#3	1.105	235.2	5.543	6.737	1.671	.0301	1.422	.1680	.8122

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0118**	**.0150**	**1.447**	**.0704**	**1.491**	**2.288**	**.0026**	**.1747**	**.4808**
Stddev	.0006	.0009	.002	.0012	.011	.005	.0007	.0005	.0009
%RSD	4.701	5.862	.1366	1.696	.7410	.2134	28.54	.2847	.1968
#1	.0119	.0155	1.447	.0715	1.495	2.290	.0032	.1752	.4819
#2	.0112	.0140	1.449	.0706	1.499	2.291	.0028	.1746	.4802
#3	.0123	.0156	1.445	.0691	1.478	2.282	.0018	.1743	.4804

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2414.8**	**5350.5**	**45799.**	**4417.6**
Stddev	4.7	.7	145.	19.9
%RSD	.19627	.01389	.31731	.45099
#1	2414.2	5349.7	45633.	4427.2
#2	2419.8	5351.1	45858.	4394.6
#3	2410.4	5350.6	45905.	4430.8

Zoom In Zoom Out

Sample Name: FA33950-4 Acquired: 5/16/2016 14:42:41 Type: Unk
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0015**	**107.3**	**.0738**	**.8035**	**.0055**	**117.6**	**.0067**	**.0753**	**.4143**
Stddev	.0001	.4	.0008	.0014	.0001	1.3	.0003	.0003	.0015
%RSD	8.433	.4098	1.043	.1757	1.037	1.129	4.315	.3793	.3708
#1	.0015	106.8	.0729	.8021	.0055	116.1	.0070	.0750	.4159
#2	.0014	107.5	.0743	.8049	.0055	118.0	.0068	.0752	.4129
#3	.0017	107.6	.0741	.8036	.0056	118.6	.0064	.0756	.4140

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.5888**	**290.8**	**17.54**	**48.52**	F **7.683**	**.0408**	**1.119**	**.1846**	**.9115**
Stddev	.0021	2.2	.11	.66	.044	.0003	.006	.0004	.0009
%RSD	.3611	.7669	.6314	1.357	.5763	.8294	.5031	.2298	.0944
#1	.5868	288.3	17.44	47.81	7.710	.0407	1.124	.1847	.9124
#2	.5910	291.5	17.52	48.64	7.708	.0412	1.121	.1850	.9115
#3	.5885	292.6	17.66	49.11	7.632	.0406	1.113	.1842	.9107

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0003**	**-.0026**	**1.445**	**.0405**	**.8334**	F **4.830**	**.0021**	**.2649**	**1.279**
Stddev	.0005	.0009	.003	.0002	.0019	.025	.0027	.0001	.001
%RSD	188.4	35.41	.1808	.4087	.2292	.5249	125.7	.0322	.0937
#1	.0001	-.0016	1.446	.0406	.8312	4.859	.0029	.2649	1.280
#2	-.0001	-.0034	1.447	.0403	.8342	4.822	.0044	.2650	1.278
#3	.0008	-.0027	1.442	.0405	.8348	4.810	-.0008	.2648	1.280

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2277.5**	**5823.4**	**49421.**	**4818.4**
Stddev	4.0	7.5	110.	31.4
%RSD	.17369	.12805	.22282	.65157
#1	2273.2	5817.2	49334.	4852.9
#2	2280.9	5821.4	49545.	4811.0
#3	2278.3	5831.7	49383.	4791.4

Zoom In Zoom Out

Sample Name: FA33905-1 Acquired: 5/16/2016 14:47:17 Type: Unk
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	**-.0006**	**63.16**	**.0173**	**2.540**	**.0101**	**7.814**	**.0006**	**.0009**
Stddev	.0001	.03	.0001	.052	.0001	.006	.0000	.0000
%RSD	9.281	.0409	.8166	2.056	.5675	.0739	2.306	3.833
#1	-.0006	63.13	.0171	2.539	.0101	7.815	.0006	.0010
#2	-.0007	63.18	.0174	2.593	.0102	7.819	.0006	.0009
#3	-.0006	63.17	.0174	2.489	.0102	7.808	.0005	.0009

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	**.0594**	**.0002**	**20.63**	**.4656**	**.5661**	**.0153**	**-.0014**	**.1612**
Stddev	.0002	.0000	.04	.0025	.0051	.0000	.0000	.0033
%RSD	.3159	26.40	.2163	.5466	.8993	.1647	3.197	2.070
#1	.0596	.0001	20.65	.4682	.5604	.0154	-.0014	.1641
#2	.0594	.0001	20.66	.4632	.5679	.0153	-.0014	.1620
#3	.0593	.0002	20.58	.4655	.5701	.0153	-.0015	.1576

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	**.0084**	**.4523**	F **-.0053**	**-.0015**	**.5347**	**.0051**	**2.923**	**.1932**
Stddev	.0000	.0021	.0002	.0001	.0006	.0002	.034	.0003
%RSD	.3277	.4711	3.887	6.438	.1068	3.051	1.169	.1796
#1	.0084	.4505	-.0052	-.0016	.5352	.0051	2.883	.1936
#2	.0084	.4547	-.0051	-.0015	.5348	.0053	2.941	.1932
#3	.0084	.4518	-.0055	-.0014	.5341	.0050	2.943	.1929

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	F **-.0182**	**.0392**	**.0247**
Stddev	.0008	.0002	.0000
%RSD	4.568	.5038	.0311
#1	-.0174	.0394	.0247
#2	-.0180	.0391	.0246
#3	-.0191	.0391	.0247

Zoom In Zoom Out

Sample Name: FA33905-1 Acquired: 5/16/2016 14:47:17 Type: Unk
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2312.0**	**19841.**	**165270.**	**15601.**
Stddev	4.3	9.	395.	61.
%RSD	.18480	.04743	.23924	.39145
#1	2316.3	19837.	164820.	15660.
#2	2307.7	19835.	165550.	15538.
#3	2312.0	19852.	165450.	15606.

Zoom In Zoom Out

Sample Name: FA33964-2 Acquired: 5/16/2016 14:51:53 Type: Unk
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0003**	**36.93**	**.0086**	**.1082**	**.0010**	F **564.8**	**.0017**	**.0035**	**.1005**
Stddev	.0001	.16	.0011	.0009	.0001	1.3	.0000	.0000	.0003
%RSD	44.14	.4349	12.54	.8208	7.473	.2365	.9388	.9278	.2724
#1	.0003	36.75	.0095	.1072	.0010	563.3	.0017	.0035	.1009
#2	.0002	37.06	.0074	.1089	.0010	566.0	.0018	.0035	.1004
#3	.0005	36.98	.0090	.1084	.0011	564.9	.0017	.0035	.1004

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0084**	**15.79**	**2.403**	**18.05**	**.1293**	**.0019**	**.6566**	**.0213**	**.4776**
Stddev	.0003	.06	.029	.08	.0003	.0000	.0080	.0000	.0018
%RSD	3.733	.3710	1.216	.4574	.2331	2.532	1.223	.0569	.3698
#1	.0081	15.73	2.373	17.96	.1295	.0019	.6656	.0212	.4788
#2	.0087	15.85	2.405	18.12	.1289	.0018	.6501	.0213	.4755
#3	.0085	15.79	2.431	18.07	.1294	.0019	.6541	.0213	.4783

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0036**	**.0046**	**1.481**	**.0165**	**.8527**	**.3073**	**-.0018**	**.0814**	**.3578**
Stddev	.0006	.0008	.001	.0002	.0050	.0005	.0021	.0004	.0013
%RSD	17.79	17.27	.0898	1.157	.5809	.1490	120.1	.4605	.3682
#1	-.0041	.0053	1.482	.0165	.8471	.3070	-.0033	.0814	.3590
#2	-.0029	.0046	1.479	.0162	.8563	.3070	.0007	.0817	.3564
#3	-.0038	.0038	1.481	.0166	.8548	.3078	-.0026	.0810	.3579

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2106.3**	**4699.7**	**39209.**	**3822.6**
Stddev	3.1	7.9	82.	20.0
%RSD	.14847	.16915	.21016	.52332
#1	2107.1	4708.8	39149.	3845.7
#2	2108.9	4696.1	39177.	3810.8
#3	2102.8	4694.2	39303.	3811.4

SGS ACCUTEST FA33720

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/16/2016 14:56:23 Type: QC
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2513**	**39.86**	**1.952**	**1.990**	**1.975**	**40.65**	**1.994**	**1.996**	**2.009**
Stddev	.0003	.04	.007	.005	.004	.11	.001	.002	.009
%RSD	.1313	.0965	.3816	.2495	.2184	.2752	.0571	.0790	.4266
#1	.2515	39.83	1.958	1.990	1.974	40.52	1.993	1.996	2.016
#2	.2514	39.90	1.955	1.995	1.980	40.72	1.995	1.998	1.999
#3	.2509	39.85	1.944	1.985	1.972	40.71	1.994	1.995	2.011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.997**	**41.12**	**40.26**	**40.17**	**2.014**	**1.995**	**39.70**	**1.984**	**1.984**
Stddev	.002	.05	.16	.10	.007	.001	.07	.005	.002
%RSD	.1176	.1102	.3911	.2599	.3371	.0607	.1661	.2501	.0755
#1	1.996	41.07	40.15	40.12	2.020	1.994	39.74	1.989	1.982
#2	2.000	41.15	40.44	40.11	2.007	1.996	39.73	1.986	1.985
#3	1.996	41.15	40.20	40.29	2.016	1.995	39.62	1.979	1.984
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.957**	**1.978**	**2.026**	**2.034**	**1.999**	**1.999**	**2.007**	**1.991**	**2.027**
Stddev	.009	.006	.009	.002	.006	.003	.004	.004	.006
%RSD	.4650	.3138	.4217	.0964	.3211	.1354	.1981	.2199	.2807
#1	1.962	1.984	2.035	2.036	1.994	2.001	2.010	1.995	2.021
#2	1.961	1.980	2.026	2.032	2.006	1.996	2.008	1.986	2.026
#3	1.946	1.972	2.018	2.035	1.997	2.000	2.003	1.993	2.032
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

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Zoom In Zoom Out

Sample Name: CCV Acquired: 5/16/2016 14:56:23 Type: QC
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2295.8**	**4617.7**	**38513.**	**3709.1**
Stddev	3.8	7.4	103.	8.7
%RSD	.16573	.15958	.26710	.23418
#1	2299.9	4610.8	38403.	3713.3
#2	2295.2	4616.9	38606.	3714.9
#3	2292.4	4625.5	38530.	3699.1

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Zoom In Zoom Out

Sample Name: CCB Acquired: 5/16/2016 15:00:35 Type: QC
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0091**	**.0007**	**.0002**	**.0003**	**.0188**	**.0001**	**.0001**	**.0000**
Stddev	.0001	.0041	.0009	.0003	.0001	.0044	.0001	.0001	.0002
%RSD	77.69	45.36	122.5	133.2	29.54	23.33	142.7	93.81	5494.
#1	.0001	.0052	.0000	.0006	.0004	.0236	.0002	.0002	.0000
#2	.0003	.0086	.0018	.0001	.0002	.0179	.0001	.0001	.0002
#3	.0001	.0134	.0004	.0000	.0002	.0150	.0000	.0000	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0058**	**-.0189**	**.0015**	**.0000**	**.0000**	**.0115**	**.0001**	**.0006**
Stddev	.0004	.0008	.0135	.0090	.0001	.0003	.0029	.0001	.0007
%RSD	674.9	14.56	71.32	603.8	230.6	1077.	25.21	125.2	119.8
#1	.0003	.0058	-.0230	-.0050	.0001	.0004	.0099	.0003	.0012
#2	-.0004	.0050	-.0299	-.0024	.0000	-.0001	.0148	.0000	-.0002
#3	.0002	.0067	-.0038	.0118	.0000	-.0003	.0097	.0001	.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0011**	**-.0001**	**.0027**	**-.0003**	**.0003**	**-.0003**	**.0014**	**.0001**	**.0000**
Stddev	.0007	.0005	.0004	.0002	.0002	.0001	.0010	.0002	.000
%RSD	65.84	851.9	14.05	60.48	70.33	35.88	73.56	148.1	291.5
#1	-.0015	.0005	.0024	-.0005	.0005	-.0003	.0009	.0002	.0000
#2	-.0003	-.0004	.0027	-.0004	.0002	-.0004	.0006	.0003	.0000
#3	-.0015	-.0003	.0031	-.0001	.0002	-.0002	.0025	-.0001	-.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

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Zoom In Zoom Out

Sample Name: CCB Acquired: 5/16/2016 15:00:35 Type: QC
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2631.1**	**4778.3**	**40107.**	**3747.3**
Stddev	10.3	5.2	218.	13.9
%RSD	.39135	.10885	.54271	.37026
#1	2620.9	4774.0	40355.	3742.9
#2	2630.9	4784.1	40017.	3736.2
#3	2641.5	4776.7	39948.	3762.9

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Zoom In Zoom Out

Sample Name: FA33865-1 Acquired: 5/16/2016 15:05:08 Type: Unk
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0010**	**19.69**	**.0065**	**.0955**	**.0008**	F **2822.**	**.0008**	**.0030**	**.1201**
Stddev	.0002	.10	.0004	.0002	.0000	24.	.0001	.0001	.0004
%RSD	20.30	.4883	5.416	.1973	5.233	.8480	12.47	2.144	.3120
#1	-.0011	19.78	.0068	.0957	.0007	2803.	.0008	.0029	.1202
#2	-.0012	19.59	.0061	.0955	.0008	2814.	.0008	.0030	.1197
#3	-.0008	19.71	.0065	.0954	.0008	2849.	.0007	.0030	.1204

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0063**	**8.663**	**1.254**	**30.88**	**.2406**	**.0016**	**4.860**	**.0218**	**.0188**
Stddev	.0001	.041	.032	.08	.0005	.0001	.020	.0002	.0014
%RSD	1.080	.4737	2.541	.2660	.1917	4.854	.4126	.9068	7.269
#1	.0064	8.680	1.280	30.91	.2409	.0017	4.884	.0216	.0204
#2	.0063	8.616	1.218	30.79	.2401	.0016	4.850	.0219	.0178
#3	.0062	8.693	1.262	30.95	.2407	.0016	4.848	.0220	.0183

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0050**	**.0134**	**1.675**	**.0142**	F **6.807**	**.0451**	**.0060**	**.0916**	**.2438**
Stddev	.0001	.0010	.004	.0003	.037	.0005	.0004	.0007	.0001
%RSD	1.551	7.309	.2295	1.936	.5448	1.122	7.409	.7813	.0599
#1	-.0049	.0145	1.672	.0139	6.841	.0446	.0055	.0912	.2437
#2	-.0050	.0126	1.679	.0144	6.767	.0452	.0061	.0912	.2439
#3	-.0050	.0130	1.673	.0143	6.813	.0456	.0064	.0924	.2439

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1610.8**	**4391.5**	**37250.**	**4085.0**
Stddev	1.9	7.0	65.	15.0
%RSD	.11557	.15870	.17529	.36769
#1	1612.9	4398.3	37324.	4069.8
#2	1609.4	4384.4	37204.	4099.9
#3	1610.1	4391.8	37221.	4085.2

Zoom In Zoom Out

Sample Name: FA33865-2 Acquired: 5/16/2016 15:09:44 Type: Unk
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0002**	**102.0**	**.0403**	**.3529**	**.0038**	F **1690.**	**.0008**	**.0067**	**.2481**
Stddev	.0004	.1	.0009	.0015	.0001	22.	.0000	.0001	.0008
%RSD	195.4	.1154	2.173	.4174	2.033	1.311	5.539	1.454	.3082
#1	-.0002	101.8	.0393	.3520	.0037	1671.	.0008	.0067	.2477
#2	.0001	102.0	.0404	.3522	.0038	1714.	.0009	.0067	.2477
#3	.0007	102.0	.0410	.3546	.0039	1685.	.0008	.0068	.2490

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.1379**	**54.53**	**8.745**	**21.75**	**.2941**	**.0062**	**2.575**	**.0440**	**.1174**
Stddev	.0006	.13	.048	.04	.0006	.0002	.007	.0001	.0028
%RSD	.4663	.2409	.5506	.2012	.1974	2.558	.2764	.3250	2.367
#1	.1377	54.38	8.748	21.74	.2938	.0064	2.575	.0441	.1144
#2	.1373	54.59	8.695	21.80	.2938	.0062	2.583	.0440	.1198
#3	.1386	54.62	8.791	21.72	.2948	.0061	2.569	.0439	.1181

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0047**	**.0237**	**2.939**	**.0165**	F **7.635**	**.2163**	**-.0017**	**.1658**	**.0775**
Stddev	.0020	.0021	.003	.0003	.045	.0004	.0016	.0002	.0003
%RSD	42.03	8.829	.0907	2.076	.5948	.2015	92.22	.1487	.3453
#1	-.0039	.0238	2.936	.0161	7.627	.2159	-.0033	.1659	.0772
#2	-.0033	.0216	2.940	.0165	7.683	.2168	-.0002	.1660	.0776
#3	-.0070	.0257	2.941	.0168	7.593	.2162	-.0016	.1655	.0777

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1809.1**	**4896.1**	**40815.**	**4168.8**
Stddev	3.5	6.8	137.	31.5
%RSD	.19504	.13910	.33461	.75498
#1	1813.0	4892.8	40930.	4200.9
#2	1806.2	4903.9	40851.	4138.0
#3	1808.0	4891.5	40664.	4167.4

Zoom In Zoom Out

Sample Name: FA33865-3 Acquired: 5/16/2016 15:14:19 Type: Unk
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0003**	**9.577**	**.0039**	**.0642**	**.0006**	F **1684.**	**.0006**	**.0017**	**.1178**
Stddev	.0002	.073	.0011	.0003	.0001	31.	.0000	.0001	.0006
%RSD	65.23	.7621	29.09	.4226	10.35	1.841	8.251	8.483	.5498
#1	-.0001	9.493	.0040	.0642	.0006	1665.	.0006	.0015	.1172
#2	-.0002	9.629	.0049	.0639	.0005	1719.	.0005	.0018	.1177
#3	-.0005	9.607	.0026	.0645	.0005	1666.	.0006	.0016	.1185

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0043**	**5.338**	**.8080**	**16.43**	**.1329**	**.0050**	**4.005**	**.0196**	**.0116**
Stddev	.0002	.038	.0274	.17	.0004	.0002	.015	.0000	.0004
%RSD	4.443	.7092	3.390	1.017	.3015	3.242	.3711	.2086	3.304
#1	.0045	5.307	.7785	16.26	.1326	.0052	3.988	.0196	.0116
#2	.0041	5.380	.8129	16.60	.1326	.0050	4.013	.0196	.0120
#3	.0044	5.327	.8326	16.44	.1333	.0049	4.014	.0196	.0112

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0043**	**.0089**	**1.488**	**.0139**	F **4.038**	**.0474**	**.0012**	**.0526**	**.0058**
Stddev	.0007	.0019	.003	.0006	.066	.0006	.0011	.0002	.0001
%RSD	15.63	21.10	.1851	4.234	1.638	1.190	87.98	.3119	2.342
#1	-.0039	.0105	1.486	.0140	3.966	.0471	.0006	.0524	.0060
#2	-.0051	.0092	1.487	.0132	4.097	.0481	.0006	.0526	.0057
#3	-.0040	.0068	1.491	.0144	4.051	.0471	.0024	.0527	.0059

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1806.1**	**4863.4**	**41029.**	**4356.6**
Stddev	.3	2.7	26.	60.6
%RSD	.01386	.05455	.06319	1.3900
#1	1806.0	4865.6	41000.	4384.0
#2	1806.0	4864.1	41040.	4287.2
#3	1806.4	4860.5	41048.	4398.6

Zoom In Zoom Out

Sample Name: FA33931-1 Acquired: 5/16/2016 15:18:57 Type: Unk
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 25.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.3291**	**810.9**	**.0836**	**2.221**	**.0157**	**316.6**	**.1585**	**.2027**	**1.362**
Stddev	.0075	4.8	.0192	.010	.0016	2.3	.0017	.0022	.017
%RSD	2.286	.5978	22.97	.4483	10.21	.7132	1.100	1.093	1.239
#1	.3315	806.7	.1058	2.212	.0175	318.8	.1592	.2015	1.344
#2	.3206	816.2	.0712	2.231	.0145	316.8	.1565	.2013	1.377
#3	.3351	809.9	.0740	2.219	.0151	314.3	.1598	.2052	1.364

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	F **1774.**	**245.4**	**4.890**	**24.81**	**4.076**	**.2885**	**5.680**	**5.250**	F **109.9**
Stddev	6.	1.2	.719	.25	.016	.0063	.252	.025	.1
%RSD	.3441	.4847	14.70	1.004	.3996	2.169	4.433	.4797	.1080
#1	1779.	244.6	4.655	24.53	4.059	.2953	5.403	5.278	109.9
#2	1777.	246.7	4.318	24.95	4.080	.2831	5.895	5.228	109.7
#3	1767.	244.8	5.697	24.96	4.091	.2871	5.742	5.245	109.9

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.2483**	**.0029**	**2.240**	**6.757**	**2.162**	**4.269**	**.0081**	**.2959**	F **2371.**
Stddev	.0070	.0540	.046	.024	.005	.018	.0117	.0018	38.
%RSD	2.803	1879.	2.068	.3509	.2550	.4141	145.7	.6019	1.609
#1	.2425	-.0313	2.224	6.770	2.164	4.250	.0111	.2978	2337.
#2	.2560	.0651	2.204	6.730	2.167	4.273	.0180	.2943	2364.
#3	.2463	-.0252	2.293	6.771	2.156	4.284	-.0049	.2958	2413.

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2491.3**	**4423.7**	**39741.**	**3755.5**
Stddev	9.9	12.0	180.	27.6
%RSD	.39699	.27190	.45181	.73359
#1	2502.7	4436.3	39932.	3761.8
#2	2485.9	4422.7	39716.	3725.3
#3	2485.1	4412.3	39576.	3779.3

Zoom In Zoom Out

Sample Name: FA33931-2 Acquired: 5/16/2016 15:23:35 Type: Unk
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 25.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.5671	1526.	.2133	2.323	.0188	398.8	.2619	.3453	2.450
Stddev	.0115	16.	.0330	.020	.0017	4.8	.0020	.0033	.008
%RSD	2.028	1.071	15.48	.8740	8.897	1.216	.7809	.9425	.3355
#1	.5542	1524.	.2513	2.323	.0189	399.8	.2616	.3432	2.451
#2	.5709	1511.	.1973	2.303	.0171	393.6	.2641	.3437	2.441
#3	.5762	1543.	.1914	2.343	.0204	403.2	.2601	.3491	2.457

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	F 2794.	507.4	5.615	30.99	7.919	.5656	6.521	8.873	F 168.5
Stddev	9.	5.8	.888	.66	.028	.0065	.067	.001	.4
%RSD	.3275	1.138	15.81	2.138	.3510	1.155	1.029	.0064	.2531
#1	2792.	507.4	6.539	30.36	7.951	.5624	6.446	8.873	168.9
#2	2786.	501.6	4.769	30.92	7.906	.5612	6.574	8.873	168.6
#3	2804.	513.2	5.536	31.68	7.900	.5731	6.543	8.874	168.1

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.7020	.0275	2.651	10.96	2.396	5.185	-.0089	.3854	F 3126.
Stddev	.0162	.0212	.054	.00	.030	.009	.0151	.0022	24.
%RSD	2.302	76.99	2.051	.0271	1.248	.1659	169.0	.5602	.7677
#1	.7117	.0403	2.630	10.96	2.393	5.194	.0075	.3874	3142.
#2	.7109	.0031	2.610	10.96	2.368	5.177	-.0221	.3831	3136.
#3	.6833	.0393	2.712	10.96	2.427	5.183	-.0121	.3858	3098.

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2485.2	4093.3	39724.	3766.0
Stddev	2.3	4.3	144.	36.7
%RSD	.09370	.10603	.36264	.97410
#1	2484.8	4098.3	39570.	3768.0
#2	2483.0	4091.2	39748.	3801.5
#3	2487.6	4090.4	39855.	3728.3

Zoom In Zoom Out

Sample Name: FA33931-3 Acquired: 5/16/2016 15:28:12 Type: Unk
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 25.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.3351	793.0	.1168	1.576	.0061	306.7	.1697	.1786	1.335
Stddev	.0024	1.3	.0158	.013	.0009	.7	.0006	.0031	.017
%RSD	.7231	.1636	13.53	.7933	14.73	.2155	.3587	1.752	1.245
#1	.3362	793.1	.1043	1.590	.0071	306.4	.1696	.1822	1.316
#2	.3324	794.3	.1115	1.566	.0054	307.4	.1691	.1765	1.344
#3	.3368	791.7	.1345	1.573	.0058	306.2	.1703	.1770	1.345

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	F 1824.	255.1	6.243	18.44	4.181	.2664	12.38	4.966	F 106.9
Stddev	15.	.4	.520	.61	.028	.0057	.16	.013	.3
%RSD	.8314	.1635	8.336	3.292	.6698	2.156	1.309	.2584	.3153
#1	1812.	254.6	6.835	17.99	4.156	.2711	12.56	4.954	107.3
#2	1841.	255.1	5.856	19.13	4.211	.2681	12.30	4.964	106.7
#3	1819.	255.5	6.038	18.20	4.175	.2600	12.27	4.980	106.7

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.3123	-.0168	2.755	5.970	1.822	3.637	.0328	.2312	F 2252.
Stddev	.0322	.0078	.040	.007	.007	.013	.0158	.0029	13.
%RSD	10.32	46.63	1.458	.1218	.3620	.3525	48.11	1.265	.5773
#1	.3165	-.0139	2.732	5.973	1.821	3.625	.0316	.2282	2262.
#2	.3422	-.0256	2.801	5.976	1.828	3.651	.0492	.2340	2237.
#3	.2782	-.0108	2.732	5.962	1.815	3.635	.0177	.2314	2255.

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2507.1	4414.4	39817.	3809.7
Stddev	4.3	6.8	146.	20.1
%RSD	.16986	.15377	.36564	.52747
#1	2503.2	4420.0	39982.	3832.8
#2	2511.6	4416.3	39764.	3799.6
#3	2506.5	4406.9	39706.	3796.6

Zoom In Zoom Out

Sample Name: FA33931-4 Acquired: 5/16/2016 15:32:50 Type: Unk
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 25.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.3999	970.9	.1365	2.059	.0080	264.0	.1972	.2190	1.700
Stddev	.0054	4.0	.0125	.003	.0013	1.7	.0012	.0030	.014
%RSD	1.361	.4099	9.145	.1223	16.83	.6529	.6242	1.368	.8214
#1	.3957	968.4	.1334	2.058	.0071	262.7	.1963	.2156	1.716
#2	.4061	975.5	.1502	2.057	.0073	265.9	.1967	.2204	1.693
#3	.3980	968.8	.1259	2.062	.0095	263.3	.1986	.2211	1.690

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	F 2128.	339.2	4.823	23.51	4.960	.3107	5.341	6.283	F 115.8
Stddev	24.	1.7	.289	.65	.023	.0068	.119	.020	.2
%RSD	1.123	.4929	5.998	2.747	.4547	2.203	2.224	.3249	.2122
#1	2155.	337.7	4.888	23.10	4.974	.3084	5.371	6.261	115.6
#2	2116.	341.0	4.506	23.18	4.934	.3184	5.210	6.286	115.6
#3	2112.	338.9	5.074	24.25	4.971	.3052	5.442	6.302	116.0

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.4528	.0332	2.703	7.989	1.833	4.262	.0049	.2857	F 2392.
Stddev	.0464	.0541	.055	.041	.007	.016	.0218	.0046	50.
%RSD	10.25	163.2	2.031	.5150	.3823	.3751	448.2	1.613	2.069
#1	.4221	.0818	2.761	7.953	1.829	4.266	.0192	.2859	2403.
#2	.5062	-.0252	2.652	7.979	1.841	4.276	.0156	.2809	2338.
#3	.4300	.0429	2.697	8.034	1.829	4.245	-.0202	.2901	2435.

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2525.4	4339.9	39815.	3830.5
Stddev	6.1	10.7	255.	43.6
%RSD	.24045	.24689	.64033	1.1373
#1	2527.1	4342.9	39554.	3844.4
#2	2530.5	4348.8	40064.	3781.6
#3	2518.7	4328.0	39827.	3865.3

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/16/2016 15:50:39 Type: QC
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2543	40.49	2.008	2.015	2.014	40.87	2.030	2.022	2.044
Stddev	.0004	.11	.009	.007	.010	.17	.006	.006	.006
%RSD	.1679	.2642	.4720	.3520	.5010	.4164	.2849	.2992	.2796
#1	.2539	40.38	2.014	2.018	2.008	40.68	2.034	2.027	2.051
#2	.2543	40.59	1.997	2.021	2.026	40.92	2.024	2.016	2.040
#3	.2547	40.49	2.013	2.007	2.009	41.00	2.034	2.024	2.043
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.025	41.74	40.56	40.72	2.058	2.027	40.44	2.028	2.007
Stddev	.004	.17	.14	.12	.006	.006	.14	.005	.006
%RSD	.1933	.4164	.3495	.2824	.2794	.3129	.3373	.2703	.3145
#1	2.025	41.57	40.40	40.59	2.064	2.031	40.41	2.032	2.014
#2	2.029	41.92	40.61	40.76	2.052	2.020	40.59	2.022	2.001
#3	2.021	41.72	40.66	40.80	2.057	2.030	40.33	2.030	2.007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.005	2.024	2.074	2.058	2.027	2.049	2.029	2.040	2.051
Stddev	.011	.006	.011	.004	.006	.002	.010	.004	.005
%RSD	.5538	.2840	.5336	.2147	.3012	.0813	.5108	.1828	.2317
#1	2.012	2.024	2.083	2.062	2.030	2.050	2.037	2.041	2.050
#2	1.992	2.018	2.062	2.053	2.032	2.047	2.018	2.035	2.046
#3	2.010	2.029	2.078	2.059	2.020	2.048	2.033	2.043	2.056
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/16/2016 15:50:39 Type: QC
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2264.4**	**4529.3**	**37922.**	**3676.5**
Stddev	8.5	14.7	251.	30.9
%RSD	.37428	.32468	.66076	.83934
#1	2257.3	4518.3	37664.	3707.1
#2	2273.8	4546.0	38164.	3677.0
#3	2262.1	4523.7	37938.	3645.4

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/16/2016 15:54:49 Type: QC
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0134**	**.0001**	**.0000**	**.0002**	**.0062**	**.0000**	**.0001**	**.0001**
Stddev	.0001	.0087	.0011	.0003	.0001	.0005	.0001	.0001	.0001
%RSD	44.45	65.50	1934.	807.8	43.50	8.780	308.8	249.5	88.95
#1	.0005	.0039	.0013	-.0002	.0002	.0065	.0001	.0002	.0001
#2	.0002	.0150	-.0003	.0000	.0003	.0055	.0000	.0000	.0000
#3	.0003	.0211	-.0008	.0003	.0001	.0064	.0000	.0000	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**.0045**	**-.0196**	**.0071**	**.0000**	**.0000**	**.0157**	**.0004**	**-.0001**
Stddev	.0000	.0010	.0226	.0186	.000	.000	.0061	.0003	.0005
%RSD	8.416	21.98	114.8	261.0	53.97	771.8	38.57	68.22	696.5
#1	.0005	.0050	-.0457	.0274	.0000	.0003	.0133	.0007	-.0007
#2	.0004	.0051	-.0065	.0028	.0000	.0000	.0226	.0003	.0002
#3	.0004	.0033	-.0067	-.0089	-.0001	-.0004	.0113	.0002	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0002**	**.0007**	**.0030**	**-.0002**	**.0001**	**-.0003**	**.0001**	**.0000**	**.0003**
Stddev	.0012	.0015	.0001	.0003	.0000	.0001	.0006	.000	.0001
%RSD	523.9	212.6	2.097	129.6	44.32	17.68	448.5	159.4	25.36
#1	.0000	.0019	.0030	.0001	.0002	-.0003	-.0005	.0000	.0003
#2	.0008	-.0009	.0029	-.0003	.0001	-.0003	.0001	.0000	.0002
#3	-.0016	.0011	.0030	-.0006	.0001	-.0004	.0008	-.0001	.0002
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/16/2015 15:54:49 Type: QC
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2641.4**	**4749.7**	**39835.**	**3782.5**
Stddev	3.2	6.5	141.	10.0
%RSD	.12290	.13730	.35332	.26406
#1	2644.4	4753.4	39833.	3774.2
#2	2641.9	4753.4	39976.	3779.6
#3	2638.0	4742.1	39695.	3793.6

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/16/2016 16:38:54 Type: Unk
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0099**	**.2137**	**.0092**	**.2101**	**.0050**	**1.081**	**.0053**	**.0550**	**.0106**
Stddev	.0003	.0102	.0001	.0036	.0001	.022	.0000	.0002	.0000
%RSD	3.090	4.786	.7368	1.729	2.147	2.046	.5012	.4053	.2757
#1	.0095	.2255	.0093	.2125	.0050	1.102	.0053	.0547	.0106
#2	.0101	.2071	.0092	.2119	.0051	1.082	.0053	.0550	.0106
#3	.0100	.2086	.0092	.2059	.0049	1.058	.0053	.0552	.0106

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0274**	**.3024**	**10.47**	**5.374**	**.0164**	**.0489**	**10.62**	**.0448**	**.0049**
Stddev	.0002	.0052	.16	.111	.0001	.0003	.15	.0004	.0001
%RSD	.7515	1.714	1.494	2.059	.5654	.5388	1.373	.9884	2.128
#1	.0276	.3045	10.63	5.476	.0165	.0488	10.74	.0447	.0050
#2	.0272	.3062	10.46	5.390	.0163	.0487	10.66	.0444	.0048
#3	.0274	.2965	10.31	5.256	.0165	.0492	10.46	.0453	.0049

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0033**	**.0103**	**.0579**	**.0537**	**.0099**	**.0093**	**.0115**	**.0504**	**.0222**
Stddev	.0005	.0008	.0001	.0005	.0002	.0001	.0007	.0004	.0001
%RSD	14.22	7.344	.1633	1.012	1.624	1.186	5.773	.7479	.5684
#1	.0032	.0108	.0579	.0536	.0099	.0092	.0107	.0500	.0221
#2	.0029	.0106	.0579	.0532	.0101	.0094	.0119	.0507	.0221
#3	.0038	.0094	.0580	.0543	.0097	.0092	.0119	.0504	.0223

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2532.0**	**4661.9**	**38911.**	**3706.0**
Stddev	11.2	15.9	239.	45.7
%RSD	.44306	.34058	.61532	1.2342
#1	2544.9	4672.1	38807.	3660.2
#2	2526.7	4670.0	38741.	3706.3
#3	2524.4	4643.6	39184.	3751.7

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/16/2016 16:43:21 Type: QC
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2538**	**40.28**	**2.039**	**1.996**	**2.022**	**40.53**	**2.056**	**2.045**	**2.071**
Stddev	.0020	.03	.006	.004	.005	.10	.009	.007	.004
%RSD	.7816	.0847	.2779	.2167	.2694	.2445	.4619	.3633	.2096
#1	.2551	40.29	2.041	2.000	2.020	40.63	2.064	2.049	2.066
#2	.2549	40.25	2.032	1.992	2.019	40.44	2.045	2.036	2.074
#3	.2516	40.32	2.043	1.995	2.029	40.51	2.058	2.049	2.073
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.031**	**41.75**	**40.19**	**40.41**	**2.099**	**2.052**	**40.54**	**2.060**	**2.019**
Stddev	.010	.08	.10	.06	.006	.009	.11	.007	.010
%RSD	.5050	.1894	.2447	.1362	.2742	.4137	.2796	.3433	.5031
#1	2.039	41.66	40.29	40.47	2.092	2.054	40.54	2.064	2.029
#2	2.035	41.78	40.18	40.36	2.103	2.043	40.42	2.051	2.009
#3	2.020	41.81	40.10	40.39	2.102	2.060	40.65	2.063	2.020
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.041**	**2.046**	**2.113**	**2.073**	**2.006**	**2.083**	**2.048**	**2.071**	**2.063**
Stddev	.006	.013	.005	.007	.001	.004	.005	.005	.012
%RSD	.2828	.6446	.2544	.3531	.0379	.1998	.2230	.2394	.5886
#1	2.040	2.054	2.113	2.076	2.007	2.081	2.051	2.068	2.076
#2	2.037	2.031	2.107	2.065	2.006	2.088	2.042	2.077	2.052
#3	2.048	2.053	2.118	2.078	2.006	2.080	2.050	2.069	2.062
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/16/2016 16:43:21 Type: QC
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2245.8**	**4451.7**	**37278.**	**3676.5**
Stddev	3.3	8.7	39.	13.1
%RSD	.14716	.19575	.10501	.35593
#1	2244.6	4452.3	37313.	3663.0
#2	2249.6	4460.1	37236.	3677.5
#3	2243.3	4442.7	37286.	3689.1

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/16/2016 16:47:33 Type: QC
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0064**	**.0000**	**-.0002**	**.0000**	**-.0001**	**.0000**	**-.0001**	**-.0002**
Stddev	.0002	.0105	.0007	.0002	.000	.0026	.000	.0001	.0002
%RSD	116.9	163.3	8438.	85.76	96.28	1939.	273.1	141.6	127.6
#1	.0002	-.0027	-.0003	.0000	.0000	-.0001	.0000	.0000	-.0001
#2	.0005	.0179	-.0005	-.0004	.0000	.0025	.0000	.0000	.0000
#3	.0000	.0040	.0008	-.0002	-.0001	-.0028	.0000	-.0002	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005**	**.0017**	**-.0525**	**-.0120**	**-.0001**	**-.0001**	**.0053**	**.0002**	**.0003**
Stddev	.0002	.0036	.0268	.0087	.0001	.0004	.0096	.0001	.0002
%RSD	31.33	210.1	51.01	72.05	56.90	612.9	179.1	35.09	54.37
#1	.0004	.0044	-.0216	-.0209	.0000	.0003	-.0020	.0003	.0005
#2	.0007	.0032	-.0681	-.0035	-.0001	-.0002	.0018	.0002	.0002
#3	.0004	-.0024	-.0679	-.0117	-.0002	-.0004	.0162	.0001	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0006**	**.0004**	**.0038**	**-.0002**	**-.0001**	**-.0002**	**.0001**	**-.0001**	**.0000**
Stddev	.0004	.0002	.0007	.0003	.0000	.0000	.0005	.0001	.0001
%RSD	70.38	47.36	18.92	118.1	48.77	14.26	580.3	111.8	338.9
#1	-.0002	.0006	.0044	.0000	-.0001	-.0002	-.0005	.0000	.0001
#2	-.0005	.0004	.0041	-.0001	.0000	-.0002	.0005	-.0002	.0000
#3	-.0010	.0002	.0030	-.0005	-.0001	-.0003	.0003	-.0001	.0000
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/16/2016 16:47:33 Type: QC
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2576.7**	**4595.6**	**38724.**	**3649.8**
Stddev	6.9	10.4	109.	8.5
%RSD	.26789	.22530	.28036	.23279
#1	2569.6	4584.2	38773.	3641.1
#2	2577.1	4598.1	38600.	3650.2
#3	2583.3	4604.4	38800.	3658.1

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/16/2016 16:52:07 Type: Unk
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	.0006	F 514.0	.0001	-.0008	-.0003	489.8	.0012	-.0004
Stddev	.0002	2.7	.0016	.0004	.0000	3.7	.0001	.0001
%RSD	37.59	.5312	1601.	48.07	12.06	.7530	4.287	25.51
#1	.0007	515.4	.0013	-.0012	-.0003	485.9	.0012	-.0004
#2	.0003	515.7	.0008	-.0005	-.0004	493.3	.0012	-.0006
#3	.0006	510.8	-.0018	-.0006	-.0003	490.2	.0013	-.0004

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	-.0001	.0014	184.7	.0108	F 533.3	-.0005	.0000	.1494
Stddev	.0005	.0003	.6	.0426	2.6	.0001	.0001	.0042
%RSD	474.2	19.89	.3398	395.5	.4902	11.05	479.0	2.819
#1	-.0007	.0012	184.4	.0308	531.6	-.0005	-.0001	.1541
#2	.0001	.0013	185.4	-.0381	536.3	-.0005	.0001	.1460
#3	.0002	.0017	184.3	.0396	532.0	-.0004	.0001	.1481

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.0001	F -.0065	-.0018	.0026	.0141	.0012	-.0004	-.0003
Stddev	.0003	.0015	.0014	.0025	.0004	.0004	.0001	.0002
%RSD	321.7	23.07	76.38	97.42	2.969	33.00	17.99	50.95
#1	.0003	-.0072	-.0033	.0038	.0143	.0012	-.0003	-.0005
#2	.0002	-.0075	-.0014	.0043	.0136	.0016	-.0004	-.0002
#3	-.0003	-.0048	-.0007	-.0003	.0143	.0008	-.0004	-.0002

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	.0018	-.0003	-.0024
Stddev	.0006	.0003	.0001
%RSD	32.28	85.66	5.607
#1	.0013	-.0006	-.0025
#2	.0017	-.0004	-.0023
#3	.0024	.0000	-.0025

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/16/2016 16:52:07 Type: Unk
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1964.2	4097.3	33820.	3458.3
Stddev	2.4	3.3	113.	19.6
%RSD	.12143	.08044	.33293	.56654
#1	1962.7	4094.0	33722.	3470.4
#2	1967.0	4100.6	33795.	3435.7
#3	1963.0	4097.4	33943.	3468.8

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 5/16/2016 16:56:47 Type: Unk
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	F 1.089	F 517.0	1.138	.5510	.5395	F 502.9	1.011	.5017	.5390
Stddev	.004	4.6	.003	.0012	.0034	3.4	.002	.0006	.0010
%RSD	.3816	.8886	.2647	.2126	.6313	.6775	.1786	.1208	.1900
#1	1.085	522.1	1.138	.5507	.5426	506.2	1.009	.5012	.5401
#2	1.093	513.1	1.135	.5500	.5358	499.4	1.013	.5024	.5389
#3	1.088	515.9	1.141	.5523	.5402	503.0	1.010	.5015	.5380

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.5758	191.7	.0517	F 546.3	.5341	.9672	.1418	1.011	1.010
Stddev	.0018	.6	.0256	1.9	.0029	.0021	.0175	.001	.003
%RSD	.3107	.3251	49.58	.3505	.5407	.2156	12.34	.1002	.2940
#1	.5753	192.2	.0641	547.7	.5372	.9649	.1268	1.012	1.010
#2	.5778	191.0	.0222	544.1	.5336	.9689	.1610	1.012	1.012
#3	.5744	191.8	.0687	547.0	.5315	.9678	.1376	1.010	1.006

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.069	1.064	.0824	.9542	1.045	1.036	.9838	.4931	1.010
Stddev	.004	.004	.0003	.0006	.006	.002	.0024	.0019	.005
%RSD	.3312	.4107	.4039	.0636	.5338	.2169	.2485	.3884	.5259
#1	1.071	1.068	.0820	.9546	1.046	1.038	.9814	.4953	1.009
#2	1.065	1.065	.0827	.9544	1.038	1.036	.9863	.4925	1.016
#3	1.070	1.059	.0826	.9535	1.049	1.034	.9837	.4916	1.005

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1900.7	3991.9	33062.	3372.6
Stddev	.9	2.4	78.	11.9
%RSD	.04602	.06009	.23500	.35257
#1	1900.4	3992.1	32976.	3360.0
#2	1900.1	3994.2	33083.	3383.7
#3	1901.7	3989.4	33127.	3373.9

Zoom In Zoom Out

Sample Name: ALSIC Acquired: 5/16/2016 17:01:18 Type: QC
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005	528.8	.0000	-.0002	-.0002	F .2451	-.0001	-.0003
Stddev	.0003	5.0	.0014	.0002	.0001	.0128	.0000	.0001
%RSD	69.71	.9480	12890.	105.1	27.85	5.241	42.23	19.23
#1	.0004	525.4	-.0014	.0000	-.0002	.2591	-.0001	-.0003
#2	.0009	534.5	.0014	-.0001	-.0003	.2424	-.0001	-.0004
#3	.0002	526.4	.0000	-.0004	-.0002	.2338	-.0001	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit						.1000		
Low Limit						-.1000		

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0009	.0012	F .1068	-.0175	F .1737	-.0002	-.0007	.0965
Stddev	.0002	.0002	.0125	.0144	.0399	.0000	.0003	.0095
%RSD	20.50	14.04	11.70	82.33	22.97	17.65	35.82	9.901
#1	-.0008	.0013	.1188	-.0214	.2080	-.0002	-.0006	.1073
#2	-.0009	.0010	.1077	-.0295	.1833	-.0002	-.0005	.0892
#3	-.0012	.0013	.0939	-.0015	.1299	-.0002	-.0010	.0929
Check ?	Chk Pass	Chk Pass	Chk Fail	None	Chk Fail	Chk Pass	Chk Pass	None
High Limit			.0500		.1000			
Low Limit			-.0500		-.1000			

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	F -.0046	F -.0028	F .0021	.0397	.0002	.0000	.0002
Stddev	.000	.0030	.0013	.0023	.0015	.0004	.0000	.0001
%RSD	324.5	65.08	47.35	108.2	3.697	256.3	821.2	39.24
#1	.0001	-.0053	-.0034	.0006	.0396	.0001	.0000	.0002
#2	-.0001	-.0071	-.0037	.0048	.0383	.0006	.0000	.0001
#3	.0000	-.0013	-.0013	.0010	.0412	-.0002	.0000	.0002
Check ?	Chk Pass	Chk Fail	Chk Fail	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass
High Limit		.0010	.0020	.0020				
Low Limit		-.0010	-.0020	-.0020				

Zoom In Zoom Out

Sample Name: ALSIC Acquired: 5/16/2016 17:01:18 Type: QC
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	F -.0042	-.0004	-.0043
Stddev	.0016	.0001	.0001
%RSD	36.59	27.46	2.708
#1	-.0039	-.0006	-.0044
#2	-.0029	-.0005	-.0044
#3	-.0060	-.0003	-.0042
Check ?	Chk Fail	Chk Pass	Chk Pass
High Limit	.0020		
Low Limit	-.0020		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2282.5	4630.7	36364.	3435.4
Stddev	11.1	23.8	170.	17.4
%RSD	.48651	.51317	.46714	.50763
#1	2285.4	4644.9	36321.	3451.4
#2	2291.9	4644.1	36219.	3416.8
#3	2270.2	4603.3	36551.	3437.9

Zoom In Zoom Out

Sample Name: CASIC Acquired: 5/16/2016 17:05:55 Type: QC
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	F .1389	-.0009	.0008	-.0004	515.4	-.0001	-.0001
Stddev	.0002	.0053	.0004	.0001	.0000	3.5	.0001	.0001
%RSD	138.4	3.846	41.59	10.12	5.335	.6758	40.28	76.53
#1	.0004	.1439	-.0011	.0009	-.0004	517.0	-.0001	.0000
#2	.0000	.1396	-.0013	.0007	-.0004	511.3	-.0001	-.0001
#3	.0001	.1332	-.0005	.0008	-.0004	517.7	-.0002	-.0002
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.0250						
Low Limit		-.0250						

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0007	.0004	.0306	-.0068	.0328	.0001	F -.0011	.0295
Stddev	.0002	.0003	.0036	.0255	.0181	.0000	.0001	.0086
%RSD	24.18	60.29	11.76	375.6	55.18	52.97	7.707	29.27
#1	-.0008	.0004	.0304	.0085	.0242	.0001	-.0011	.0385
#2	-.0006	.0002	.0271	.0073	.0205	.0000	-.0010	.0287
#3	-.0006	.0007	.0343	-.0362	.0535	.0001	-.0012	.0213
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Fail	None
High Limit							.0010	
Low Limit							-.0010	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	-.0004	F -.0030	F .0039	.0149	-.0004	F -.0012	-.0008
Stddev	.0002	.0002	.0004	.0010	.0003	.0002	.0001	.0000
%RSD	76.73	49.71	13.59	25.17	2.045	56.34	8.874	3.583
#1	.0004	-.0003	-.0030	.0044	.0152	-.0004	-.0013	-.0008
#2	.0004	-.0003	-.0035	.0044	.0146	-.0006	-.0011	-.0008
#3	.0000	-.0007	-.0027	.0027	.0147	-.0002	-.0013	-.0008
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Fail	None	Chk Pass	Chk Fail	Chk Pass
High Limit			.0020	.0020			.0010	
Low Limit			-.0020	-.0020			-.0010	

Zoom In Zoom Out

Sample Name: CASIC Acquired: 5/16/2016 17:05:55 Type: QC
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	.0017	-.0005	-.0008
Stddev	.0010	.0001	.0000
%RSD	58.45	11.02	5.829
#1	.0024	-.0005	-.0009
#2	.0022	-.0005	-.0008
#3	.0006	-.0006	-.0008
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2148.7	4182.4	34706.	3521.1
Stddev	3.7	5.1	291.	17.6
%RSD	.17208	.12228	.83795	.50088
#1	2144.4	4177.1	34505.	3519.5
#2	2150.9	4187.3	35040.	3539.5
#3	2150.7	4182.8	34574.	3504.3

Zoom In Zoom Out

Sample Name: FESIC Acquired: 5/16/2016 17:10:38 Type: QC
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0164	F -.0025	F -.0020	-.0004	F .1377	F .0019	-.0005
Stddev	.0001	.0036	.0005	.0001	.0001	.0028	.0003	.0001
%RSD	149.1	21.69	19.45	5.931	17.66	2.024	16.83	23.04
#1	-.0001	.0126	-.0022	-.0021	-.0003	.1382	.0016	-.0005
#2	.0002	.0170	-.0022	-.0019	-.0005	.1347	.0022	-.0004
#3	.0002	.0196	-.0030	-.0020	-.0004	.1402	.0020	-.0006
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Fail	Chk Fail	Chk Pass
High Limit			.0020	.0010		.1000	.0010	
Low Limit			-.0020	-.0010		-.1000	-.0010	

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .0012	F .0028	192.3	-.0313	-.0496	-.0006	-.0009	.0155
Stddev	.0004	.0002	1.1	.0315	.0194	.0001	.0001	.0075
%RSD	32.82	5.481	.5934	100.7	39.19	8.468	13.56	48.62
#1	.0015	.0030	193.5	-.0356	-.0593	-.0007	-.0009	.0113
#2	.0007	.0027	191.2	-.0604	-.0622	-.0006	-.0007	.0242
#3	.0013	.0028	192.3	.0022	-.0272	-.0006	-.0010	.0110
Check ?	Chk Fail	Chk Fail	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit	.0010	.0020						
Low Limit	-.0010	-.0020						

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0006	F -.0083	.0003	F -.0053	.0516	.0003	-.0004	-.0013
Stddev	.0002	.0004	.0002	.0012	.0009	.0002	.0001	.0001
%RSD	35.10	4.958	56.92	22.17	1.797	50.82	11.84	4.468
#1	-.0006	-.0078	.0001	-.0065	.0505	.0005	-.0004	-.0013
#2	-.0008	-.0084	.0004	-.0053	.0520	.0004	-.0005	-.0013
#3	-.0004	-.0085	.0005	-.0042	.0521	.0001	-.0004	-.0014
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass
High Limit		.0010		.0020				
Low Limit		-.0010		-.0020				

Zoom In Zoom Out

Sample Name: FESIC Acquired: 5/16/2016 17:10:38 Type: QC
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	TI1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	F .0040	.0005	F .0054
Stddev	.0004	.0002	.0001
%RSD	9.887	39.66	2.446
#1	.0040	.0006	.0053
#2	.0035	.0003	.0054
#3	.0043	.0006	.0056
Check ?	Chk Fail	Chk Pass	Chk Fail
High Limit	.0020		.0050
Low Limit	-.0020		-.0050

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2528.1	4489.7	38602.	3731.7
Stddev	29.3	51.3	149.	30.7
%RSD	1.1606	1.1418	.38716	.82226
#1	2562.0	4548.7	38723.	3701.9
#2	2511.4	4465.1	38649.	3763.2
#3	2511.0	4455.4	38435.	3730.2

Zoom In Zoom Out

Sample Name: MGSIC Acquired: 5/16/2016 17:15:08 Type: QC
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .0013	.0171	-.0008	-.0005	-.0004	.0972	-.0002	-.0002
Stddev	.0004	.0035	.0010	.0004	.0000	.0020	.0000	.0002
%RSD	32.42	20.69	129.4	83.92	2.462	2.023	18.88	99.56
#1	.0009	.0133	.0003	-.0003	-.0003	.0994	-.0003	-.0002
#2	.0014	.0203	-.0018	-.0002	-.0004	.0967	-.0002	-.0003
#3	.0018	.0176	-.0008	-.0010	-.0004	.0956	-.0002	.0000
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.0010							
Low Limit	-.0010							

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0005	.0000	.0494	-.0154	534.9	.0000	F -.0016	.0283
Stddev	.0001	.000	.0090	.0309	3.6	.0000	.0001	.0021
%RSD	12.91	1037.	18.20	201.4	.6720	300.7	4.557	7.359
#1	-.0005	-.0001	.0591	-.0237	537.9	.0000	-.0015	.0276
#2	-.0005	-.0002	.0477	-.0413	530.9	.0000	-.0016	.0267
#3	-.0004	.0003	.0414	.0189	535.9	.0000	-.0016	.0307
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Fail	None
High Limit							.0010	
Low Limit							-.0010	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	F .0016	-.0010	-.0007	.0077	-.0002	-.0003	-.0009
Stddev	.0000	.0008	.0003	.0002	.0002	.0002	.0000	.0000
%RSD	30.26	53.46	26.19	27.42	2.316	112.3	11.92	2.085
#1	.0000	.0023	-.0012	-.0009	.0076	.0001	-.0003	-.0009
#2	.0000	.0007	-.0010	-.0005	.0076	-.0003	-.0003	-.0009
#3	.0000	.0017	-.0007	-.0007	.0079	-.0003	-.0003	-.0009
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit		.0010						
Low Limit		-.0010						

Zoom In Zoom Out

Sample Name: MGSIC Acquired: 5/16/2016 17:15:08 Type: QC
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	TI1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	.0012	F -.0012	.0034
Stddev	.0007	.0001	.0001
%RSD	57.65	6.606	3.381
#1	.0017	-.0013	.0033
#2	.0014	-.0012	.0036
#3	.0004	-.0011	.0034
Check ?	Chk Pass	Chk Fail	Chk Pass
High Limit		.0010	
Low Limit		-.0010	

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2166.0	4202.2	35777.	3657.2
Stddev	5.7	7.5	388.	21.0
%RSD	.26516	.17959	1.0851	.57433
#1	2163.4	4196.0	35462.	3639.6
#2	2162.0	4199.9	36211.	3680.5
#3	2172.6	4210.6	35658.	3651.7

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/16/2016 17:19:39 Type: QC
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2573	40.92	2.085	2.023	2.067	40.98	2.096	2.078	2.091
Stddev	.0010	.18	.005	.003	.011	.21	.009	.008	.009
%RSD	.3784	.4482	.2461	.1484	.5475	.5161	.4295	.3799	.4510
#1	.2581	40.71	2.084	2.020	2.054	40.74	2.097	2.080	2.100
#2	.2563	41.06	2.080	2.022	2.074	41.14	2.086	2.070	2.091
#3	.2577	40.99	2.090	2.026	2.074	41.07	2.104	2.085	2.081
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.064	42.56	40.55	40.90	2.127	2.087	41.23	2.105	2.050
Stddev	.004	.21	.16	.26	.009	.007	.10	.008	.008
%RSD	.1763	.4983	.3834	.6328	.4144	.3533	.2523	.3789	.3728
#1	2.061	42.31	40.37	40.68	2.136	2.086	41.13	2.105	2.045
#2	2.062	42.69	40.64	41.19	2.126	2.079	41.24	2.097	2.047
#3	2.068	42.67	40.64	40.84	2.118	2.094	41.34	2.112	2.059
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	TI1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.086	2.091	2.153	2.100	2.032	2.120	2.078	2.099	2.088
Stddev	.002	.003	.006	.010	.005	.004	.005	.007	.013
%RSD	.1159	.1637	.2889	.4753	.2377	.2070	.2470	.3402	.5964
#1	2.087	2.093	2.154	2.104	2.027	2.123	2.079	2.103	2.090
#2	2.083	2.092	2.146	2.088	2.035	2.122	2.072	2.102	2.075
#3	2.088	2.087	2.159	2.107	2.035	2.115	2.082	2.091	2.100
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/16/2016 17:19:39 Type: QC
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2212.0**	**4364.8**	**36696.**	**3603.8**
Stddev	7.2	12.2	90.	30.6
%RSD	.32687	.28008	.24417	.85036
#1	2213.8	4361.9	36600.	3630.1
#2	2218.2	4378.2	36778.	3570.2
#3	2204.1	4354.3	36711.	3611.2

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/16/2016 17:23:51 Type: QC
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0038**	**-.0003**	**.0000**	**.0000**	**.0039**	**.0000**	**-.0001**	**-.0001**
Stddev	.0005	.0034	.0003	.000	.0001	.0032	.0000	.0000	.0001
%RSD	364.4	89.04	92.57	3359.	355.2	83.30	47.58	42.55	120.5
#1	-.0004	.0011	-.0006	.0002	.0001	.0076	.0000	.0000	-.0003
#2	.0006	.0028	-.0001	-.0004	.0000	.0023	.0000	-.0001	.0000
#3	.0003	.0076	-.0002	.0001	.0000	.0017	.0000	-.0001	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0053**	**-.0603**	**-.0070**	**-.0001**	**.0000**	**.0046**	**.0001**	**-.0001**
Stddev	.0001	.0042	.0128	.0170	.0000	.000	.0050	.0001	.0003
%RSD	37.18	80.08	21.22	244.1	17.27	2295.	110.1	63.43	526.2
#1	.0002	.0095	-.0600	.0012	-.0001	.0003	.0017	.0002	.0001
#2	.0005	.0053	-.0732	-.0266	-.0001	-.0001	.0016	.0001	.0002
#3	.0003	.0011	-.0476	.0044	-.0001	-.0002	.0103	.0001	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005**	**.0016**	**.0032**	**-.0003**	**-.0001**	**-.0003**	**.0013**	**.0000**	**.0000**
Stddev	.0006	.0016	.0006	.0002	.0001	.0001	.0014	.000	.0000
%RSD	123.1	101.7	19.14	77.27	75.15	22.60	101.5	470.4	165.4
#1	.0012	.0030	.0037	-.0005	.0000	-.0003	.0002	.0000	.0000
#2	.0002	-.0001	.0033	.0000	-.0001	-.0003	.0009	-.0002	.0000
#3	.0001	.0018	.0025	-.0005	-.0002	-.0004	.0028	.0001	.0000
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/16/2016 17:23:51 Type: QC
Method: 60102007_042011(v114) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2603.7**	**4634.8**	**39150.**	**3738.4**
Stddev	1.0	9.6	110.	28.7
%RSD	.03683	.20645	.28211	.76653
#1	2602.6	4636.6	39022.	3710.0
#2	2604.3	4624.5	39212.	3767.3
#3	2604.2	4643.3	39215.	3738.0

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Ag 328.068 {103}	☒	2	V	-0.005817	0.000000	No
			Fe	0.000003	0.000000	No
Al 396.152 { 85}	☒	1	Mo	0.040330	0.000000	No
As 189.042 {478}	☒	4	Fe	-0.000077	0.000000	No
			Cr	-0.000653	0.000000	No
			Mo	0.000444	0.000000	No
			Al	0.000001	0.000000	No
Ba 455.403 { 74}	☒	1	Fe	0.000008	0.000000	No
Be 313.042 {108}	☒	2	V	0.000625	0.000000	No
			Ti	-0.000289	0.000000	No
Ca 317.933 {106}	☒	None				
Cd 226.502 {449}	☒	4	Fe	0.000095	0.000000	No
			Ca	-0.000000	0.000000	No
			Al	-0.000002	0.000000	No
			Ti	0.000103	0.000000	No
Co 228.616 {447}	☒	3	Mo	-0.001220	0.000000	No
			Ti	0.002210	0.000000	No
			Fe	0.000000	0.000000	No
Cr 267.716 {126}	☒	4	Al	0.000005	0.000000	No
			Fe	-0.000020	0.000000	No
			Ca	0.000002	0.000000	No
			Cd	-0.000120	0.000000	No
Cu 324.754 {104}	☒	10	Mo	0.000189	0.000000	No
			Sn	-0.000012	0.000000	No
			V	-0.000158	0.000000	No
			Al	0.000003	0.000000	No
			Mg	0.000003	0.000000	No
			Co	-0.000547	0.000000	No
			Cd	0.000190	0.000000	No
			Fe	-0.000114	0.000000	No
			Ca	0.000001	0.000000	No
			Ti	-0.000268	0.000000	No
Fe 259.940 {130}	☒	None				
In 230.606 {446}*	☒	None				
K 766.490 { 44}	☒	None				
Mg 279.079 {121}	☒	None				
Mn 257.610 {131}	☒	2	Fe	0.000008	0.000000	No
			Mg	0.000000	0.000000	No
Mo 202.030 {467}	☒	1	Fe	-0.000010	0.000000	No
Na 589.592 { 57}	☒	None				
Ni 231.604 {445}	☒	7	Fe	-0.000041	0.000000	No
			Co	0.000112	0.000000	No
			Mo	0.000980	0.000000	No
			Sb	-0.000120	0.000000	No
			Al	0.000003	0.000000	No
			Be	-0.000304	0.000000	No
			Tl	0.000172	0.000000	No
Pb 220.353 {453}	☒	8	Al	0.000178	0.000000	No
			Fe	0.000075	0.000000	No
			Mo	-0.002189	0.000000	No
			Cu	0.000467	0.000000	No
			Ti	0.000036	0.000000	No
			Si	0.000232	0.000000	No
			Ca	-0.000005	0.000000	No
			Cr	-0.000260	0.000000	No
Sb 206.833 {463}	☒	11	Fe	0.000027	0.000000	No
			Cr	0.011486	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
			Mo	-0.003944	0.000000	No
			V	-0.000441	0.000000	No
			Sn	-0.008695	0.000000	No
			Ti	0.000278	0.000000	No
			Ca	0.000001	0.000000	No
			Ni	-0.000818	0.000000	No
			Al	0.000010	0.000000	No
			Mn	-0.000133	0.000000	No
			Mg	-0.000002	0.000000	No
Se 196.090 {472}	☒	12	Fe	0.000017	0.000000	No
			Ca	-0.000003	0.000000	No
			Mn	0.000331	0.000000	No
			Mo	0.000111	0.000000	No
			Al	-0.000035	0.000000	No
			V	0.000000	0.000000	No
			Zn	0.000000	0.000000	No
			Sr	-0.000111	0.000000	No
			As	0.000125	0.000000	No
			Cd	-0.000250	0.000000	No
			Mg	-0.000004	0.000000	No
			Cr	-0.000326	0.000000	No
Si 212.412 {459}	☒	1	Mo	0.000000	0.000000	No
Sn 189.989 {477}	☒	None				
Sr 407.771 { 83}	☒	1	Ca	0.000013	0.000000	No
Ti 334.941 {101}	☒	1	Ca	-0.000011	0.000000	No
Tl 190.856 {477}	☒	10	Co	0.004099	0.000000	No
			Fe	-0.000018	0.000000	No
			Al	-0.000005	0.000000	No
			Ba	-0.000051	0.000000	No
			Ti	-0.000648	0.000000	No
			Sb	0.000167	0.000000	No
			Ca	-0.000004	0.000000	No
			Cr	0.000340	0.000000	No
			Mg	-0.000002	0.000000	No
			V	0.000015	0.000000	No
V 292.402 {115}	☒	5	Fe	0.000013	0.000000	No
			Cr	-0.003634	0.000000	No
			Mo	-0.009536	0.000000	No
			Ti	0.000303	0.000000	No
			Mn	-0.000333	0.000000	No
Y 224.306 {450}*	☒	None				
Y 360.073 { 94}*	☒	None				
Y 371.030 { 91}*	☒	None				
Zn 206.200 {463}	☒	5	Cr	-0.001305	0.000000	No
			Al	0.000011	0.000000	No
			Ca	0.000003	0.000000	No
			Fe	-0.000010	0.000000	No
			As	0.001105	0.000000	No

Element, Wavelength and Order	Date of Fit	Date of Cal.	Type of Fit	Weighting	A0	A1	A2	n (Exponent)
Ag 328.068 {103}	5/16/2016 11:12:30	5/16/2016 10:37:19	Linear	1/Conc	-0.000380	0.586507	0.000000	1.000000
Al 396.152 { 85}	5/16/2016 11:12:30	5/16/2016 10:37:19	Linear	1/Conc	0.000663	0.220718	0.000000	1.000000
As 189.042 {478}	5/16/2016 11:12:30	5/16/2016 10:37:19	Linear	1/Conc	-0.000783	0.175511	0.000000	1.000000
Ba 455.403 { 74}	5/16/2016 11:12:30	5/16/2016 10:37:19	Linear	1/Conc	0.005795	8.949706	0.000000	1.000000
Be 313.042 {108}	5/16/2016 11:12:30	5/16/2016 10:37:19	Linear	1/Conc	0.003692	10.633568	0.000000	1.000000
Ca 317.933 {106}	5/16/2016 11:12:30	5/16/2016 10:37:19	Linear	1/Conc	0.006993	0.223622	0.000000	1.000000
Cd 226.502 {449}	5/16/2016 11:12:30	5/16/2016 10:37:19	Linear	1/Conc	-0.000378	4.491279	0.000000	1.000000
Co 228.616 {447}	5/16/2016 11:12:30	5/16/2016 10:37:19	Linear	1/Conc	-0.000207	2.511446	0.000000	1.000000
Cr 267.716 {126}	5/16/2016 11:12:30	5/16/2016 10:37:19	Linear	1/Conc	-0.000050	0.497801	0.000000	1.000000
Cu 324.754 {104}	5/16/2016 11:12:30	5/16/2016 10:37:19	Linear	1/Conc	0.007380	0.926330	0.000000	1.000000
Fe 259.940 {130}	5/16/2016 11:12:30	5/16/2016 10:37:19	Linear	1/Conc	0.003152	0.155616	0.000000	1.000000
In 230.606 {446}*	5/16/2016 11:12:30	5/5/2010 12:30:54	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
K 766.490 { 44}	5/16/2016 11:12:30	5/16/2016 10:37:19	Linear	1/Conc	-0.004513	0.097284	0.000000	1.000000
Mg 279.079 {121}	5/16/2016 11:12:30	5/16/2016 10:37:19	Linear	1/Conc	-0.000330	0.023209	0.000000	1.000000
Mn 257.610 {131}	5/16/2016 11:12:30	5/16/2016 10:37:19	Linear	1/Conc	0.001544	2.732349	0.000000	1.000000
Mo 202.030 {467}	5/16/2016 11:12:30	5/16/2016 10:37:19	Linear	1/Conc	0.002381	1.114652	0.000000	1.000000
Na 589.592 { 57}	5/16/2016 11:12:30	5/16/2016 10:37:19	Linear	1/Conc	-0.003861	0.419946	0.000000	1.000000
Ni 231.604 {445}	5/16/2016 11:12:30	5/16/2016 10:37:19	Linear	1/Conc	-0.000441	1.493873	0.000000	1.000000
Pb 220.353 {453}	5/16/2016 11:12:30	5/16/2016 10:37:19	Linear	1/Conc	0.000439	0.769949	0.000000	1.000000
Sb 206.833 {463}	5/16/2016 11:12:30	5/16/2016 10:37:19	Linear	1/Conc	0.001198	0.256066	0.000000	1.000000
Se 196.090 {472}	5/16/2016 11:12:30	5/16/2016 10:37:19	Linear	1/Conc	-0.000023	0.125632	0.000000	1.000000
Si 212.412 {459}	5/16/2016 11:12:30	5/16/2016 10:37:19	Linear	1/Conc	0.004995	0.416349	0.000000	1.000000
Sn 189.989 {477}	5/16/2016 11:12:30	5/16/2016 10:37:19	Linear	1/Conc	0.000725	0.383523	0.000000	1.000000
Sr 407.771 { 83}	5/16/2016 11:12:30	5/16/2016 10:37:19	Linear	1/Conc	0.006759	16.101986	0.000000	1.000000
Ti 334.941 {101}	5/16/2016 11:12:30	5/16/2016 10:37:19	Linear	1/Conc	0.003340	2.002717	0.000000	1.000000
Tl 190.856 {477}	5/16/2016 11:12:30	5/16/2016 10:37:19	Linear	1/Conc	-0.001759	0.276430	0.000000	1.000000
V 292.402 {115}	5/16/2016 11:12:30	5/16/2016 10:37:19	Linear	1/Conc	-0.000459	0.688896	0.000000	1.000000
Y 224.306 {450}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 360.073 { 94}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 371.030 { 91}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Zn 206.200 {463}	5/16/2016 11:12:30	5/16/2016 10:37:19	Linear	1/Conc	0.000694	2.097444	0.000000	1.000000

	Element, Wavelength and Order	Correlation	Std Error of Est	Predicted MDL	Predicted MQL	Status	Reslope		QC Norm	
							Slope	Y-int	Slope factor	Offset
	Ag 328.068 {103}	0.999855	0.000096	0.000340	0.001133	OK.	1.000000	0.000000	1	0
	Al 396.152 { 85}	0.999892	0.005244	0.008156	0.027186	OK.	1.000000	0.000000	1	0
	As 189.042 {478}	0.999971	0.000108	0.000844	0.002814	OK.	1.000000	0.000000	1	0
	Ba 455.403 { 74}	0.999969	0.005647	0.000256	0.000855	OK.	1.000000	0.000000	1	0
	Be 313.042 {108}	0.999932	0.009967	0.000069	0.000229	OK.	1.000000	0.000000	1	0
	Ca 317.933 {106}	0.999908	0.004892	0.003725	0.012415	OK.	1.000000	0.000000	1	0
	Cd 226.502 {449}	0.999905	0.004997	0.000051	0.000170	OK.	1.000000	0.000000	1	0
	Co 228.616 {447}	0.999889	0.003015	0.000102	0.000338	OK.	1.000000	0.000000	1	0
	Cr 267.716 {126}	0.999801	0.000799	0.000251	0.000836	OK.	1.000000	0.000000	1	0
	Cu 324.754 {104}	0.999867	0.001211	0.000201	0.000669	OK.	1.000000	0.000000	1	0
	Fe 259.940 {130}	0.999133	0.010444	0.002779	0.009262	OK.	1.000000	0.000000	1	0
	In 230.606 {446}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	K 766.490 { 44}	0.999878	0.002446	0.032460	0.108201	OK.	1.000000	0.000000	1	0
	Mg 279.079 {121}	0.999922	0.000466	0.023640	0.078800	OK.	1.000000	0.000000	1	0
	Mn 257.610 {131}	0.999547	0.006626	0.000041	0.000135	OK.	1.000000	0.000000	1	0
	Mo 202.030 {467}	0.999895	0.001299	0.000134	0.000445	OK.	1.000000	0.000000	1	0
	Na 589.592 { 57}	0.999867	0.011048	0.007854	0.026179	OK.	1.000000	0.000000	1	0
	Ni 231.604 {445}	0.999885	0.001822	0.000174	0.000581	OK.	1.000000	0.000000	1	0
	Pb 220.353 {453}	0.999939	0.000684	0.000623	0.002077	OK.	1.000000	0.000000	1	0
	Sb 206.833 {463}	0.999987	0.000104	0.000921	0.003070	OK.	1.000000	0.000000	1	0
	Se 196.090 {472}	0.999971	0.000078	0.001698	0.005659	OK.	1.000000	0.000000	1	0
	Si 212.412 {459}	0.999532	0.001026	0.000403	0.001343	OK.	1.000000	0.000000	1	0
	Sn 189.989 {477}	0.999682	0.000779	0.000327	0.001091	OK.	1.000000	0.000000	1	0
	Sr 407.771 { 83}	0.999869	0.020984	0.000090	0.000301	OK.	1.000000	0.000000	1	0
	Ti 334.941 {101}	0.999638	0.004340	0.000095	0.000316	OK.	1.000000	0.000000	1	0
	Tl 190.856 {477}	0.999956	0.000209	0.001035	0.003450	OK.	1.000000	0.000000	1	0
	V 292.402 {115}	0.999861	0.000913	0.000229	0.000765	OK.	1.000000	0.000000	1	0
	Y 224.306 {450}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Y 360.073 { 94}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Y 371.030 { 91}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Zn 206.200 {463}	0.999904	0.002345	0.000082	0.000273	OK.	1.000000	0.000000	1	0

DOD + (MB+MS)

Accutest Laboratories SE Metals Digestion Log Soil

MP #: 30349 Method of Digestion: SW846-3050B

Prep Date/Time (mm/dd/yy 24:00): 5/12/16 9:44
HotBlock I.D. 6
Thermometer I.D. 60711
Correction Factor (°C) -1
Temperature Observed/Corrected (°C) 92.91
Balance I.D. ADVPRO3

Spk. Sol. [A]	Volume Used(ml)	Pipette #
ACC938	0.50	10
ACC924	0.25	10
MET5377	0.25	10

Filter Lot#: 150928009
Dig. Tube Lot# T220264-261

Added [B]:

	H_2O_2	HNO_3	HCL	PTFE Boiling Chips
Lot#	157487	111510D	4115100	R263-5K012

Sample #		Wt., g	Final Volume(ml)	Comments
Method Blank(MB)		1.00	50.0	
Spike Blank(SB)		1.00		
Matrix Spike(MS)		1.10		
Matrix Spike Dup(MSD)		1.24		
Duplicate(DUP)		1.30		
1 QC [C] FA33828-1	[D] 1	1.36		
2 FA33835-1	6	1.36		
3 (3) FA33697-1	1	1.22		(3) Metal shavings in matrix. H_2O_2 very reacti ADDED SLOWLY. ADDED 4.0 mL ADDITIONAL H_2O_2 DUE TO EFFERVECENSE. DB 5/12/16
4 FA33720-1	1	1.31		
5 ↓	2	1.17		
6 (2) FA33764-1	↓	1.05		
7 ↓	2	1.02		(2) HEAVY FOAMING W/ H_2O_2 ADDED SLOWLY DB 5/12/16
8	3	1.04		
9 (2) ↓	4	1.19		(1) limited sample. used entire contents. DB 5/12/16
10	5	1.15		
11 ↓	6	1.04		
12 FA33857-1	5	1.27		
13 FA33756-2	1	1.05		VAPOR BLAST GRIT BLAST
14 (1) ↓	3	0.98		
15	4	1.42		
16	5	1.40		
17 ↓	6	1.12		
18 FA33652-1R	1	1.19	50.0	
19				
20				
21 [E]				
22 [E]				
23 [E]				
24 [E]				

5/12/16

Analyst: [redacted] Date: 5/12/16

QC Review: [redacted] Date: 5.12.16

A Used for SB, MS, MSD
B For reagent volumes used consult SOP MET 104, current revision
C Parent sample used to prepare MS, MSD, DUP
D Bottle Number
E Additional Matrix QC

icpsoildigestionlog012010.xls Rev 01/20/10 DM

* DB 5/12/16

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General Chemistry

QC Data Summaries

Includes the following where applicable:

- Percent Solids Raw Data Summary

Percent Solids Raw Data Summary

Job Number: FA33720
Account: ARCTXEL Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

Sample: FA33720-1 **Analyzed:** 17-MAY-16 by JK **Method:** SM19 2540G
ClientID: FTBL-SED-49-0-6-050416-QA

Wet Weight (Total)	6.21	g
Tare Weight	1.11	g
Dry Weight (Total)	6.17	g
Solids, Percent	99.2	%

Sample: FA33720-2 **Analyzed:** 17-MAY-16 by JK **Method:** SM19 2540G
ClientID: FTBL-SED-34-0-6-050516-QA

Wet Weight (Total)	8.37	g
Tare Weight	1.18	g
Dry Weight (Total)	8.37	g
Solids, Percent	100	%

LABORATORY DATA CONSULTANTS, INC.
2701 Loker Ave. West, Suite 220, Carlsbad, CA 92010 Bus: 760-827-1100 Fax: 760-827-1099

ARCADIS U.S., Inc.
1114 Benfield Boulevard, Suite A
Millersville. MD 21108
ATTN: [redacted]

May 31, 2016

SUBJECT: Fort Bliss, Castner Range, Data Validation

Dear [redacted],

Enclosed is the final validation report for the fraction listed below. This SDG was received on May 19, 2016. Attachment 1 is a summary of the samples that were reviewed for each analysis.

LDC Project #36372:

SDG #	**Fraction:**
FA33720	Metals

The data validation was performed under Level III guidelines. The analyses were validated using the following documents, as applicable to each method:

- Final Quality Assurance Project Plan, Military Munitions Response Program Remedial Investigation, Closed Castner Firing Range, Fort Bliss, El Paso, Texas, February 2015
- U.S. Department of Defense Quality Systems Manual for Environmental Laboratories, 5.0, July 2013
- USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review, October 2004
- EPA SW 846, Third Edition, Test Methods for Evaluating Solid Waste, update 1, July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III, December 1996; update IIIA, April 1998; IIIB, November 2004; Update IV, February 2007; Update V, July 2014

Please feel free to contact us if you have any questions.

Sincerely,

(b) (6) [redacted]

Project Manager/Senior Chemist

206 pages-EM

Attachment 1

EDD 90/10

LDC #36372 (Arcadis-Millersville, MD / Fort Bliss, Castner Range)

LDC	SDG#	DATE REC'D	(2) DATE DUE	(7) Metals (6010C)																															
Matrix:	Water/Soil			W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S
A	FA33720	05/19/16	06/03/16	0	2																														
Total	T/PG			0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2

Shaded cells indicate Level IV validation (all other cells are Level III validation). These sample counts do not include MS/MSD, and DUPs

V:\LOGIN\Arcadis\Fort Bliss\36372ST.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Fort Bliss, Castner Range

LDC Report Date: May 24, 2016

Parameters: Metals

Validation Level: Level III

Laboratory: Accutest Laboratories

Sample Delivery Group (SDG): FA33720

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
FTBL-SED-49-0-6-050416-QA	FA33720-1	Soil	05/04/16
FTBL-SED-34-0-6-050516-QA	FA33720-2	Soil	05/05/16

Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Final Quality Assurance Project Plan, Military Munitions Response Program Remedial Investigation, Closed Castner Firing Range, Fort Bliss, El Paso, Texas (February 2015), the U.S. Department of Defense (DoD) Quality Systems Manual (QSM) for Environmental Laboratories, Version 5.0 (July 2013), and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines (CLPNFG) for Inorganic Superfund Data Review (October 2004). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Antimony, Arsenic, Beryllium, Copper, Lead, Nickel, and Zinc by Environmental Protection Agency (EPA) SW 846 Method 6010C

All sample results were subjected to Level III data validation, which comprises an evaluation of quality control (QC) summary results.

The following are definitions of the data qualifiers utilized during data validation:

J (Estimated): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated due to non-conformances discovered during data validation.

U (Non-detected): The compound or analyte was analyzed for and positively identified by the laboratory; however the compound or analyte should be considered non-detected at the reported concentration due to the presence of contaminants detected in the associated blank(s).

UJ (Non-detected estimated): The compound or analyte was reported as not detected by the laboratory; however the reported quantitation/detection limit is estimated due to non-conformances discovered during data validation.

R (Rejected): The sample results were rejected due to gross non-conformances discovered during data validation. Data qualified as rejected is not usable.

NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected compound or analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

I. Sample Receipt and Technical Holding Times

All samples were received in good condition.

All technical holding time requirements were met.

II. Instrument Calibration

Initial and continuing calibrations were performed as required by the method.

The initial calibration verification (ICV) and continuing calibration verification (CCV) standards were within QC limits with the following exceptions:

Date	Lab. Reference/ID	Analyte	%R (Limits)	Associated Samples	Flag	A or P
05/13/16	CRI (17:56)	Antimony	138.0 (80-120)	All samples in SDG FA33720	NA	-

III. ICP Interference Check Sample Analysis

The frequency of interference check sample (ICS) analysis was met. All criteria were within QC limits.

IV. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks with the following exceptions:

Blank ID	Analyte	Maximum Concentration	Associated Samples
PB (prep blank)	Antimony	0.065 mg/Kg	All samples in SDG FA33720
ICB/CCB	Antimony	1.3 ug/L	All samples in SDG FA33720

Data qualification by the laboratory blanks was based on the maximum contaminant concentration in the laboratory blanks in the analysis of each analyte. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated laboratory blanks.

V. Field Blanks

No field blanks were identified in this SDG.

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Duplicate Sample Analysis

The laboratory has indicated that there were no duplicate (DUP) analyses specified for the samples in this SDG, and therefore duplicate analyses were not performed for this SDG.

VIII. Serial Dilution

Serial dilution was not performed for this SDG.

IX. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

X. Field Duplicates

No field duplicates were identified in this SDG.

XI. Sample Result Verification

Raw data were not reviewed for Level III validation.

XII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

The quality control criteria reviewed were met and are considered acceptable. Based upon the data validation all results are considered valid and usable for all purposes.

Fort Bliss, Castner Range
Metals - Data Qualification Summary - SDG FA33720

No Sample Data Qualified in this SDG

Fort Bliss, Castner Range
Metals - Laboratory Blank Data Qualification Summary - SDG FA33720

No Sample Data Qualified in this SDG

Fort Bliss, Castner Range
Metals - Field Blank Data Qualification Summary - SDG FA33720

No Sample Data Qualified in this SDG

LDC #: 36372A4b
SDG #: FA33720
Laboratory: Accutest Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level III/~~IV~~
gm/y

Date: 5-20-16
Page: 1 of 1
Reviewer: MG
2nd Reviewer:

METHOD: Metals (EPA SW 846 Method 6010C)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A	
II.	Instrument Calibration	SW	
III.	ICP Interference Check Sample (ICS) Analysis	A	
IV.	Laboratory Blanks	SW	
V.	Field Blanks	N	
VI.	Matrix Spike/Matrix Spike Duplicates	N	client specified
VII.	Duplicate sample analysis	N	" "
VIII.	ICP Serial Dilution	N	not performed
IX.	Laboratory control samples	A	LCS
X.	Field Duplicates	N	
XI.	Sample Result Verification	N	Not reviewed for Level III validation.
XII	Overall Assessment of Data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

** Indicates sample underwent Level IV validation

	Client ID (gm/y)	Lab ID (gm/y)	Matrix	Date
1	FTBL-SED-49-0-6-050416-QA	FA33720-1	Soil	05/04/16
2	FTBL-SED-34-0-6-050516-QA	FA33720-2	Soil	05/05/16
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15	PBS			

Notes:

LDC #: 36372A46

VALIDATION FINDINGS WORKSHEET
Sample Specific Element Reference

Reviewer: MG
2nd reviewer:

All circled elements are applicable to each sample.

Sample ID	Matrix	Target Analyte List (TAL)
1, 2	S	Al, (Sb), (As), Ba, (Be), Cd, Ca, Cr, Co, (Cu), Fe, (Pb), Mg, Mn, Hg, (Ni), K, Se, Ag, Na, Tl, V, (Zn), Mo, B, Si, CN^-, ____
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN^-, ____
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN^-, ____
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN^-, ____
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN^-, ____
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN^-, ____
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN^-, ____
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN^-, ____
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN^-, ____
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN^-, ____
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN^-, ____
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN^-, ____
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN^-, ____
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN^-, ____
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN^-, ____
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN^-, ____
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN^-, ____
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN^-, ____
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN^-, ____
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN^-, ____
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN^-, ____
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN^-, ____
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN^-, ____
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN^-, ____
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN^-, ____
Analysis Method		
ICP	S	Al, (Sb), (As), Ba, (Be), Cd, Ca, Cr, Co, (Cu), Fe, (Pb), Mg, Mn, Hg, (Ni), K, Se, Ag, Na, Tl, V, (Zn), Mo, B, Si, CN^-, ____
ICP-MS		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN^-, ____
GFAA		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN^-, ____

Comments: Mercury by CVAA if performed

LDC #: 36372 A46

VALIDATION FINDINGS WORKSHEET
Calibration

Reviewer: MG
2nd Reviewer: [signature]

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Were all instruments calibrated daily, each set-up time, and were the proper number of standards used?

(Y) N N/A Were all initial and continuing calibration verification percent recoveries (%R) within the control limits of 90-110% for all analytes except mercury (80-120%) and cyanide (85-115%)?

LEVEL IV ONLY:

Y N N/A Was a midrange cyanide standard distilled?

Y N N/A Are all correlation coefficients ≥0.995?

Y N N/A Were recalculated results acceptable? See Level IV Initial and Continuing Calibration Recalculation Worksheet for recalculations.

#	Date	Calibration ID	Analyte	%R	Associated Samples	Qualification of Data
1	5-13-16	CRI (17:56)	Sb	138.0 (80-120)	all	Jdets/P (all N.D.)

Comments:

CAL.4SW

LDC #: 36372A4b
SDG #: See Cover
METHOD: Trace metals (EPA SW 864 Method 6010C)
Sample Concentration units, unless otherwise noted: mg/kg

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES
Soil preparation factor applied: 50x
Associated Samples: all (ND)

Reviewer: MG
2nd Reviewer:

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	No Qual's.									
Sb	0.065		1.3	0.325										

Samples with analyte concentrations within five times the associated ICB, CCB or PB concentration are listed above with the identifications from the Validation Completeness Worksheet. These sample results were qualified as not detected, "U".
Note : a - The listed analyte concentration is the highest ICB, CCB, or PB detected in the analysis of each element.

The attached zipped file contains three files:

File	Format	Description
1) Readme_FortBliss_053116.doc	MS Word 2003	A "Readme" file (this document).
2) LDC_Review_quals_and_codes.doc		LDC Reason Code List
3) FA33720.EFW2LabRES.xls	MS Excel 2003	A spreadsheet for the following SDG(s): FA33720 36372A

No discrepancies were observed between the hardcopy data packages and the electronic data deliverables during EDD population of validation qualifiers. A 100% verification of the EDD was not performed.

Please contact Pei Geng at (760) 827-1100 if you have any questions regarding this electronic data submittal.

LDC #: 36372

EDD POPULATION COMPLETENESS WORKSHEET

Date: 5/31/16
Page: 1 of 1
2nd Reviewer: CB

The LDC job number listed above was entered by CB.

	EDD Process		Comments/Action
I.	EDD Completeness	-	
Ia.	- All methods present?	y	
Ib.	- All samples present/match report?	y	
Ic.	- All reported analytes present?	y	
Id.	-10% or 100% verification of EDD?	y	
II.	EDD Preparation/Entry	-	
IIa.	- Carryover U/J?	N	
IIb.	- Reason Codes used? If so, note which codes	y	LDC
IIc.	-Additional Information (QC Level, Validator, Date, Validated Y/N, etc.)	y	
III.	Reasonableness Checks	-	
IIIa.	- Do all qualified ND results have ND qualifier (i.e. UJ)?	NA	No validation quals added
IIIb.	- Do all qualified detect results have detect qualifier (i.e. J)?	↓	
IIIc.	- If reason codes used, do all qualified results have reason code field populated?	↓	
IIId.	-Does the detect flag require changing for blank qualifiers? If so, are all U results marked ND?	y/NA	
IIIe.	- Do blank concentrations in report match EDD, where data was qualified due to blank?	NA	
IIIf.	- Were any results rejected for overall assessment? If so, were results changed to nonreportable?	N/NA	
IIIg.	- Is the readme complete? If applicable, were edits or discrepancies listed in the readme?	y.	

Notes: _____

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e-Hardcopy 2.0
Automated Report

Technical Report for

Arcadis-US, Inc

Castner Range; Ft Bliss, TX

06261038.0000

SGS Accutest Job Number: FA33973

Sampling Dates: 05/09/16 - 05/12/16



Report to:

Arcadis-US, Inc
401 E Main St Suite 400
El Paso, TX 79901
(b) (6) @arcadis.com;(b) (6) @arcadis.com;
(b) (6) g@lab-data.com
ATTN: (b) (6)

Total number of pages in report: **313**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

(b) (6)
Technical Director

Client Service contact: (b) (6)

Certifications: FL (E83510), LA (03051), KS (E-10327), IA (366), IL (200063), NC (573), NJ (FL002), SC (96038001) DoD ELAP (L-A-B L2229), CA (2937), TX (T104704404), PA (68-03573), VA (460177), AK, AR, GA, KY, MA, NV, OK, UT, WA

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Sample Summary

Arcadis-US, Inc

Job No: FA33973

Castner Range; Ft Bliss, TX
Project No: 06261038.0000

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA33973-1	05/09/16	10:30	AG	05/14/16	SO	Soil	FTBL-SED-29-0-6-050916-QA
FA33973-2	05/10/16	15:10	AG	05/14/16	SO	Soil	FTBL-SED-12-0-6-051016-QA
FA33973-3	05/12/16	10:05	AG	05/14/16	SO	Soil	FTBL-SED-02-0-6-051216-QA

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Arcadis-US, Inc **Job No:** FA33973

Site: Castner Range; Ft Bliss, TX **Report Date:** 5/26/2016 10:01:21

3 Sample(s) were collected on/ between 05/09/2016 and 05/12/2016 and were received at SGS Accutest Southeast (SASE) on 05/14/2016 properly preserved, at 3 Deg. C and intact. These Samples received an SASE job number of FA33973. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Metals By Method SW846 6010C

Matrix: SO **Batch ID:** MP30364

All samples were digested within the recommended method holding time.
All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA33973-1DUP, FA33973-1MS, FA33973-1MSD, FA33973-1PS, FA33973-1SDL were used as the QC samples.

Matrix Spike/Matrix Spike Duplicate Recovery(s) for Antimony are outside control limits. Spike recovery indicates possible matrix interference and/or sample non-homogeneity.

RPD(s) for Serial Dilution for Arsenic, Beryllium, Zinc are outside control limits for sample MP30364-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

Sample(s) FA33973-1, FA33973-2 are for Antimony, Arsenic, Beryllium, Copper, Nickel, Zinc, Antimony have elevated reporting limit(s) due to matrix interference.

MP30364-PS1 for Antimony: Spike recovery indicates matrix interference and/or outside control limits due to high level in sample relative to spike amount.

Matrix: SO **Batch ID:** MP30374

All samples were digested within the recommended method holding time.
All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA34018-1DUP, FA34018-1MS, FA34018-1MSD, FA34018-1PS, FA34018-1SDL were used as the QC samples.

Matrix Spike Recovery(s) for Antimony are outside control limits. Spike recovery indicates possible matrix interference and/or sample non-homogeneity.

Matrix Spike Duplicate Recovery(s) for Antimony, Lead are outside control limits. Spike recovery indicates possible matrix interference and/or sample non-homogeneity.

RPD(s) for Duplicate for Beryllium, Copper are outside control limits for sample MP30374-D1. RPD acceptable due to low duplicate and sample concentrations.

RPD(s) for Serial Dilution for Arsenic, Beryllium, Copper, Lead, Nickel, Zinc are outside control limits for sample MP30374-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

Sample(s) FA33973-3 are for Antimony, Arsenic, Beryllium, Copper, Nickel, Zinc have elevated reporting limit(s) due to matrix interference.

MP30374-PS1 for Lead: Spike recovery indicates matrix interference and/or outside control limits due to high level in sample relative to spike amount.

MP30374-PS1 for Antimony: Spike recovery indicates matrix interference and/or outside control limits due to high level in sample relative to spike amount.

Wet Chemistry By Method SM19 2540G

Matrix: SO **Batch ID:** GN70973

Sample(s) FA33825-3DUP were used as the QC samples for Solids, Percent.

SGS Accutest (SASE) certifies that this report meets the project requirements for analytical data produced for the samples as received at SASE and as stated on the COC. SASE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the SASE Quality Manual except as noted above. This report is to be used in its entirety. SASE is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

_____ Date: May 26, 2016
Kim Benham, Client Services (signature on file)

Summary of Hits

Job Number: FA33973
Account: Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX
Collected: 05/09/16 thru 05/12/16

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
FA33973-1	**FTBL-SED-29-0-6-050916-QA**					
Arsenic [a]		4.9	4.0	2.0	mg/kg	SW846 6010C
Beryllium [a]		1.6 J	2.0	0.40	mg/kg	SW846 6010C
Copper [a]		13.0	10	0.80	mg/kg	SW846 6010C
Lead		15.1	0.80	0.16	mg/kg	SW846 6010C
Nickel [a]		8.9 J	16	0.40	mg/kg	SW846 6010C
Zinc [a]		57.8	8.0	2.0	mg/kg	SW846 6010C
FA33973-2	**FTBL-SED-12-0-6-051016-QA**					
Arsenic [a]		17.2	4.1	2.1	mg/kg	SW846 6010C
Beryllium [a]		1.5 J	2.1	0.41	mg/kg	SW846 6010C
Copper [a]		29.3	10	0.83	mg/kg	SW846 6010C
Lead		34.8	0.83	0.17	mg/kg	SW846 6010C
Nickel [a]		13.9 J	17	0.41	mg/kg	SW846 6010C
Zinc [a]		309	8.3	2.1	mg/kg	SW846 6010C
FA33973-3	**FTBL-SED-02-0-6-051216-QA**					
Arsenic [a]		8.0 J	19	9.5	mg/kg	SW846 6010C
Beryllium [a]		3.2 J	9.5	1.9	mg/kg	SW846 6010C
Copper [a]		13.1 J	48	3.8	mg/kg	SW846 6010C
Lead		20.8	0.76	0.15	mg/kg	SW846 6010C
Nickel [a]		7.1 J	76	1.9	mg/kg	SW846 6010C
Zinc [a]		60.3	38	9.5	mg/kg	SW846 6010C

(a) Elevated reporting limit(s) due to matrix interference.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: FTBL-SED-29-0-6-050916-QA
Lab Sample ID: FA33973-1
Matrix: SO - Soil
Project: Castner Range; Ft Bliss, TX

Date Sampled: 05/09/16
Date Received: 05/14/16
Percent Solids: 98.8

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Antimony [a]	2.0 U	8.0	2.0	0.52	mg/kg	10	05/17/16	05/18/16	LM	SW846 6010C [2]	SW846 3050B [3]
Arsenic [a]	4.9	4.0	2.0	0.80	mg/kg	10	05/17/16	05/18/16	LM	SW846 6010C [2]	SW846 3050B [3]
Beryllium [a]	1.6 J	2.0	0.40	0.20	mg/kg	10	05/17/16	05/18/16	LM	SW846 6010C [2]	SW846 3050B [3]
Copper [a]	13.0	10	0.80	0.40	mg/kg	10	05/17/16	05/18/16	LM	SW846 6010C [2]	SW846 3050B [3]
Lead	15.1	0.80	0.16	0.040	mg/kg	1	05/17/16	05/17/16	LM	SW846 6010C [1]	SW846 3050B [3]
Nickel [a]	8.9 J	16	0.40	0.20	mg/kg	10	05/17/16	05/18/16	LM	SW846 6010C [2]	SW846 3050B [3]
Zinc [a]	57.8	8.0	2.0	1.2	mg/kg	10	05/17/16	05/18/16	LM	SW846 6010C [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA13165
(2) Instrument QC Batch: MA13167
(3) Prep QC Batch: MP30364

(a) Elevated reporting limit(s) due to matrix interference.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Report of Analysis

Client Sample ID: FTBL-SED-12-0-6-051016-QA
Lab Sample ID: FA33973-2
Matrix: SO - Soil
Project: Castner Range; Ft Bliss, TX

Date Sampled: 05/10/16
Date Received: 05/14/16
Percent Solids: 100.0

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Antimony [a]	2.1 U	8.3	2.1	0.54	mg/kg	10	05/17/16	05/18/16	LM	SW846 6010C [2]	SW846 3050B [3]
Arsenic [a]	17.2	4.1	2.1	0.83	mg/kg	10	05/17/16	05/18/16	LM	SW846 6010C [2]	SW846 3050B [3]
Beryllium [a]	1.5 J	2.1	0.41	0.21	mg/kg	10	05/17/16	05/18/16	LM	SW846 6010C [2]	SW846 3050B [3]
Copper [a]	29.3	10	0.83	0.41	mg/kg	10	05/17/16	05/18/16	LM	SW846 6010C [2]	SW846 3050B [3]
Lead	34.8	0.83	0.17	0.041	mg/kg	1	05/17/16	05/17/16	LM	SW846 6010C [1]	SW846 3050B [3]
Nickel [a]	13.9 J	17	0.41	0.21	mg/kg	10	05/17/16	05/18/16	LM	SW846 6010C [2]	SW846 3050B [3]
Zinc [a]	309	8.3	2.1	1.2	mg/kg	10	05/17/16	05/18/16	LM	SW846 6010C [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA13165
(2) Instrument QC Batch: MA13167
(3) Prep QC Batch: MP30364

(a) Elevated reporting limit(s) due to matrix interference.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Report of Analysis

Client Sample ID: FTBL-SED-02-0-6-051216-QA
Lab Sample ID: FA33973-3
Matrix: SO - Soil
Project: Castner Range; Ft Bliss, TX

Date Sampled: 05/12/16
Date Received: 05/14/16
Percent Solids: 98.9

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Antimony [a]	9.5 U	38	9.5	2.5	mg/kg	50	05/19/16	05/23/16	LM	SW846 6010C [2]	SW846 3050B [3]
Arsenic [a]	8.0 J	19	9.5	3.8	mg/kg	50	05/19/16	05/23/16	LM	SW846 6010C [2]	SW846 3050B [3]
Beryllium [a]	3.2 J	9.5	1.9	0.95	mg/kg	50	05/19/16	05/23/16	LM	SW846 6010C [2]	SW846 3050B [3]
Copper [a]	13.1 J	48	3.8	1.9	mg/kg	50	05/19/16	05/23/16	LM	SW846 6010C [2]	SW846 3050B [3]
Lead	20.8	0.76	0.15	0.038	mg/kg	1	05/19/16	05/20/16	LM	SW846 6010C [1]	SW846 3050B [3]
Nickel [a]	7.1 J	76	1.9	0.95	mg/kg	50	05/19/16	05/23/16	LM	SW846 6010C [2]	SW846 3050B [3]
Zinc [a]	60.3	38	9.5	5.7	mg/kg	50	05/19/16	05/23/16	LM	SW846 6010C [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA13172
(2) Instrument QC Batch: MA13175
(3) Prep QC Batch: MP30374

(a) Elevated reporting limit(s) due to matrix interference.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

5

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- QC Evaluation: DOD QSM5 Limits

Accutest Laboratories Southeast

Chain of Custody

ACCUTEST LABORATORIES

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 • FAX: 407-425-0707
www.accutest.com

Accutest JOB # FA33973 PAGE 1 OF 1

Accutest Quote # | SKIFF#

Client / Reporting Information

Company Name: Arcadis
Address: 630 Plaza Dr. Suite 6000
City: Highlands Ranch State: CO Zip:
(b) (6) E-mail: @arcadis.com
Phone#: (303) 471-3099
Sampler(s) Name(s) (Printed): (b) (6)

Project Information

Project Name: Casmer Range, FT Bliss TX
Street: 401 E. Main St. Suite 400
City: El Paso State: TX
Project #: 06260103B.0000
Fax #:
Client Purchase Order #:

Analytical Information

Sb, As, Be, Cu, Pb, Ni

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe

Accutest Sample #	Field ID / Point of Collection	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	CONTAINER INFORMATION: OTHER	NONE	HCl	HNO3	H2SO4	NaOH+ZnAc	DI WATER	MEOH	Analytical Information	LAB USE ONLY
1	FTBL-SED-29-0-6-050916-QA	050916	1030	AG	S	1		X							X	
2	FTBL-SED-12-0-6-051016-QA	051016	1510	AG	S	1		X							X	
3	FTBL-SED-02-0-6-051216-QA	051216	1005	AG	S	1		X							X	

TURNAROUND TIME (Business Days)

Approved By: / Rush Code

- [X] 10 Days Standard
- [ ] 7 Day RUSH
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [ ] OTHER

Emergency or Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULT1 (EPA LEVEL 4)
- [ ] EDD'S

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:
(b) (6)	051316/1005	2 FX	3 FX		(b) (6) 5/13/16 930
5	Date Time:	6	7	Date Time:	

Lab Use Only: Custody Seal in Place: Y N Temp Blank Provided: Y N Preserved where Applicable: Y N Total # of Coolers: 1 Cooler Temperature (s) Celsius: 3-0

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FA33973: Chain of Custody
Page 1 of 3

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA33973 CLIENT: Arcadis PROJECT: Castner Range

DATE/TIME RECEIVED: 5/14/16 930 {MM/DD/YY 24:00} NUMBER OF COOLERS RECEIVED: 1

METHOD OF DELIVERY: [FEDEX] UPS ACCUTEST COURIER DELIVERY OTHER:

AIRBILL NUMBERS: 8100 1224 6769

COOLER INFORMATION

- [ ] CUSTODY SEAL NOT PRESENT OR NOT INTACT
- [ ] CHAIN OF CUSTODY NOT RECEIVED (COC)
- [ ] ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- [ ] SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- [ ] TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- [ ] TRIP BLANK PROVIDED
- [X] TRIP BLANK NOT PROVIDED
- [X] TRIP BLANK NOT ON COC
- [ ] TRIP BLANK INTACT
- [ ] TRIP BLANK NOT INTACT
- [ ] RECEIVED WATER TRIP BLANK
- [ ] RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM_____ 5-GRAM_____

NUMBER OF 5035 FIELD KITS ? _____

NUMBER OF LAB FILTERED METALS ? _____

TEMPERATURE INFORMATION

- [ ] IR THERM ID_____ CORR. FACTOR +0.0
- [ ] OBSERVED TEMPS: 3.0
- [ ] CORRECTED TEMPS: 3.0 (USED FOR LIMS)

SAMPLE INFORMATION

- [ ] INCORRECT NUMBER OF CONTAINERS USED
- [ ] SAMPLE RECEIVED IMPROPERLY PRESERVED
- [ ] INSUFFICIENT VOLUME FOR ANALYSIS
- [ ] DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- [ ] ID'S ON COC DO NOT MATCH LABEL
- [ ] VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- [ ] BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- [ ] NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- [ ] UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- [ ] SAMPLE CONTAINER(S) RECEIVED BROKEN
- [ ] 5035 FIELD KITS NOT RECEIVED WITHIN 48 HOURS
- [ ] BULK VOA SOIL JARS NOT RECEIVED WITHIN 48 HOURS
- [ ] % SOLIDS JAR NOT RECEIVED
- [ ] RESIDUAL CHLORINE PRESENT LOT#_____

{APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS}

TEST STRIP LOT#s pH 0-3 230315 pH 10-12 219813A OTHER (specify) _____

SUMMARY OF COMMENTS:

TECHNICIAN SIGNATURE/DATE: 5/14/16 REVIEWER SIGNATURE/DATE: 5/14/16

NF 11/15 RECEIPTLOG040416.xls

5.1 5

FA33973: Chain of Custody
Page 2 of 3



FA33973: Chain of Custody
Page 3 of 3

QC Evaluation: DOD QSM5 Limits

Job Number: FA33973
Account: Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX
Collected: 05/09/16 thru 05/12/16

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MP30364	SW846 6010C						
MP30364-B1	7440-36-0	Antimony	BSP	REC	98	%	79-114
MP30364-B1	7440-38-2	Arsenic	BSP	REC	99.2	%	82-111
MP30364-B1	7440-41-7	Beryllium	BSP	REC	104	%	83-113
MP30364-B1	7440-50-8	Copper	BSP	REC	106.4	%	81-117
MP30364-B1	7439-92-1	Lead	BSP	REC	101.2	%	81-112
MP30364-B1	7440-02-0	Nickel	BSP	REC	104	%	83-113
MP30364-B1	7440-66-6	Zinc	BSP	REC	103.6	%	82-113
MP30364-S1	7440-36-0	Antimony	MS	REC	21.5 [a]	%	79-114
MP30364-S1	7440-38-2	Arsenic	MS	REC	92.3	%	82-111
MP30364-S1	7440-41-7	Beryllium	MS	REC	100.4	%	83-113
MP30364-S1	7440-50-8	Copper	MS	REC	97.6	%	81-117
MP30364-S1	7439-92-1	Lead	MS	REC	102.3	%	81-112
MP30364-S1	7440-02-0	Nickel	MS	REC	101.4	%	83-113
MP30364-S1	7440-66-6	Zinc	MS	REC	96.1	%	82-113
MP30364-S2	7440-36-0	Antimony	MSD	REC	23.5 [a]	%	79-114
MP30364-S2	7440-36-0	Antimony	MSD	RPD	10.5	%	20
MP30364-S2	7440-38-2	Arsenic	MSD	REC	87.9	%	82-111
MP30364-S2	7440-38-2	Arsenic	MSD	RPD	3	%	20
MP30364-S2	7440-41-7	Beryllium	MSD	REC	84.7	%	83-113
MP30364-S2	7440-41-7	Beryllium	MSD	RPD	8.5	%	20
MP30364-S2	7440-50-8	Copper	MSD	REC	80.9	%	81-117
MP30364-S2	7440-50-8	Copper	MSD	RPD	7.1	%	20
MP30364-S2	7439-92-1	Lead	MSD	REC	99.7	%	81-112
MP30364-S2	7439-92-1	Lead	MSD	RPD	.5	%	20
MP30364-S2	7440-02-0	Nickel	MSD	REC	89.8	%	83-113
MP30364-S2	7440-02-0	Nickel	MSD	RPD	7.2	%	20
MP30364-S2	7440-66-6	Zinc	MSD	REC	81.8	%	82-113
MP30364-S2	7440-66-6	Zinc	MSD	RPD	3.5	%	20
MP30364-D1	7440-36-0	Antimony	DUP	RPD	0	%	20
MP30364-D1	7440-38-2	Arsenic	DUP	RPD	6.3	%	20
MP30364-D1	7440-41-7	Beryllium	DUP	RPD	6.5	%	20
MP30364-D1	7440-50-8	Copper	DUP	RPD	17.6	%	20
MP30364-D1	7439-92-1	Lead	DUP	RPD	12.7	%	20
MP30364-D1	7440-02-0	Nickel	DUP	RPD	7	%	20
MP30364-D1	7440-66-6	Zinc	DUP	RPD	12.3	%	20
MP30374	SW846 6010C						
MP30374-B1	7440-36-0	Antimony	BSP	REC	98.8	%	79-114
MP30374-B1	7440-38-2	Arsenic	BSP	REC	98.9	%	82-111
MP30374-B1	7440-41-7	Beryllium	BSP	REC	104	%	83-113
MP30374-B1	7440-50-8	Copper	BSP	REC	104.8	%	81-117

* Sample used for QC is not from job FA33973

QC Evaluation: DOD QSM5 Limits

Job Number: FA33973
Account: Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX
Collected: 05/09/16 thru 05/12/16

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MP30374-B1	7439-92-1	Lead	BSP	REC	98.4	%	81-112
MP30374-B1	7440-02-0	Nickel	BSP	REC	103.2	%	83-113
MP30374-B1	7440-66-6	Zinc	BSP	REC	102	%	82-113
MP30374-S1*	7440-36-0	Antimony	MS	REC	43.7 [a]	%	79-114
MP30374-S1*	7440-38-2	Arsenic	MS	REC	100.6	%	82-111
MP30374-S1*	7440-41-7	Beryllium	MS	REC	103.3	%	83-113
MP30374-S1*	7440-50-8	Copper	MS	REC	103.8	%	81-117
MP30374-S1*	7439-92-1	Lead	MS	REC	105.5	%	81-112
MP30374-S1*	7440-02-0	Nickel	MS	REC	112.8	%	83-113
MP30374-S1*	7440-66-6	Zinc	MS	REC	100.3	%	82-113
MP30374-S2*	7440-36-0	Antimony	MSD	REC	44 [a]	%	79-114
MP30374-S2*	7440-36-0	Antimony	MSD	RPD	2	%	20
MP30374-S2*	7440-38-2	Arsenic	MSD	REC	96.1	%	82-111
MP30374-S2*	7440-38-2	Arsenic	MSD	RPD	7.1	%	20
MP30374-S2*	7440-41-7	Beryllium	MSD	REC	97.2	%	83-113
MP30374-S2*	7440-41-7	Beryllium	MSD	RPD	7.4	%	20
MP30374-S2*	7440-50-8	Copper	MSD	REC	102	%	81-117
MP30374-S2*	7440-50-8	Copper	MSD	RPD	3.8	%	20
MP30374-S2*	7439-92-1	Lead	MSD	REC	126.2 [a]	%	81-112
MP30374-S2*	7439-92-1	Lead	MSD	RPD	10	%	20
MP30374-S2*	7440-02-0	Nickel	MSD	REC	107.8	%	83-113
MP30374-S2*	7440-02-0	Nickel	MSD	RPD	5.9	%	20
MP30374-S2*	7440-66-6	Zinc	MSD	REC	99.8	%	82-113
MP30374-S2*	7440-66-6	Zinc	MSD	RPD	2	%	20
MP30374-D1*	7440-36-0	Antimony	DUP	RPD	0	%	20
MP30374-D1*	7440-38-2	Arsenic	DUP	RPD	6.5	%	20
MP30374-D1*	7440-41-7	Beryllium	DUP	RPD	22.9 [b]	%	20
MP30374-D1*	7440-50-8	Copper	DUP	RPD	30.3 [b]	%	20
MP30374-D1*	7439-92-1	Lead	DUP	RPD	13	%	20
MP30374-D1*	7440-02-0	Nickel	DUP	RPD	7.7	%	20
MP30374-D1*	7440-66-6	Zinc	DUP	RPD	11.2	%	20

(a) Spike recovery indicates possible matrix interference and/or sample non-homogeneity.
(b) RPD acceptable due to low duplicate and sample concentrations.

* Sample used for QC is not from job FA33973

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Instrument Runlogs
- Initial and Continuing Calibration Blanks
- Initial and Continuing Calibration Checks
- High and Low Check Standards
- Interfering Element Check Standards
- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries
- IDL and Linear Range Summaries

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051716M1.ICP Date Analyzed: 05/17/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13165
Parameters: Sb,As,Be,Cu,Pb,Ni,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
09:48	MA13165-STD1	1		STDA
09:52	MA13165-STD2	1		STDB
09:56	MA13165-STD3	1		STDC
10:00	MA13165-STD4	1		STDD
10:04	MA13165-HSTD1	1		
10:10	MA13165-ICV1	1		
10:18	MA13165-ICB1	1		
10:21	MA13165-CRIA1	1		
10:28	MA13165-ICSA1	1		
10:34	MA13165-ICSAB1	1		
10:40	MA13165-CCV1	1		
10:50	MA13165-CCB1	1		
10:54	FA33679-3	2		(sample used for QC only; not part of login FA33973)
10:58	MP30353-D1	2		
11:02	MP30353-S1	2		
11:06	MP30353-S2	2		
11:10	MP30353-PS1	2		
11:14	MP30353-SD1	10		
11:18	ZZZZZZ	2		
11:22	ZZZZZZ	25		
11:26	ZZZZZZ	2		
11:30	ZZZZZZ	10		
11:34	MA13165-CCV2	1		
11:38	MA13165-CCB2	1		
11:43	ZZZZZZ	5		
11:47	ZZZZZZ	5		
11:51	ZZZZZZ	500		
11:55	ZZZZZZ	500		
11:59	ZZZZZZ	500		
12:03	ZZZZZZ	500		
12:11	MA13165-CCV3	1		
12:15	MA13165-CCB3	1		
14:02	MA13165-ICV2	1		

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051716M1.ICP Date Analyzed: 05/17/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13165
Parameters: Sb,As,Be,Cu,Pb,Ni,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
14:11	MA13165-CCV4	1		
14:18	MA13165-CCB4	1		
14:22	MP30364-MB1	1		
14:26	MP30364-B1	1		
14:30	FA33973-1	1		
14:34	MP30364-D1	1		
14:39	MP30364-SD1	5		
14:43	MP30364-PS1	1		
14:47	MP30364-S1	1		
14:52	MP30364-S2	1		
14:56	FA33973-2	1		
---------->	Last reportable sample/prep for job FA33973			
15:01	ZZZZZZ	1		
15:05	MA13165-CCV5	1		
15:09	MA13165-CCB5	1		
15:13	ZZZZZZ	500		
15:17	ZZZZZZ	500		
15:21	ZZZZZZ	500		
15:25	ZZZZZZ	500		
15:29	ZZZZZZ	500		
15:33	ZZZZZZ	250		
15:37	ZZZZZZ	250		
15:42	ZZZZZZ	250		
15:46	ZZZZZZ	250		
15:50	ZZZZZZ	250		
15:54	MA13165-CCV6	1		
15:58	MA13165-CCB6	1		
16:02	ZZZZZZ	250		
16:06	ZZZZZZ	250		
16:10	ZZZZZZ	250		
16:14	ZZZZZZ	250		
16:18	ZZZZZZ	250		
16:23	ZZZZZZ	250		
16:27	ZZZZZZ	250		

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051716M1.ICP Date Analyzed: 05/17/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13165
Parameters: Sb,As,Be,Cu,Pb,Ni,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
16:31	MA13165-CRIA2	1		
16:35	MA13165-ICSA2	1		
16:39	MA13165-ICSAB2	1		
16:43	MA13165-CCV7	1		
16:47	MA13165-CCB7	1		
---------->	Last reportable CCB for job FA33973			
16:52	MA13165-CCV8	1		
16:56	MA13165-CCB8	1		

Refer to raw data for calibration curve and standards.

INTERNAL STANDARD SUMMARY

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051716M1.ICP Date Analyzed: 05/17/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13165
Parameters: Sb,As,Be,Cu,Pb,Ni,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
09:48	MA13165-STD1	7044	55074	5247	3116
09:52	MA13165-STD2	6914	52844	5151	2838
09:56	MA13165-STD3	6653	51066	5126	2566
10:00	MA13165-STD4	6303	48925	5010	2349
10:04	MA13165-HSTD1	6327	48903	5018	2346
10:10	MA13165-ICV1	6516	50142	5042	2526
10:18	MA13165-ICB1	7054 R	54558 R	5197 R	3094 R
10:21	MA13165-CRIA1	6871	52681	5117	2884
10:28	MA13165-ICSA1	6051	44917	4820	2265
10:34	MA13165-ICSAB1	6008	44853	4854	2226
10:40	MA13165-CCV1	6573	50783	5106	2545
10:50	MA13165-CCB1	6927	54749	5106	3075
10:54	FA33679-3	6525	50409	5083	2668
10:58	MP30353-D1	6487	50322	5091	2649
11:02	MP30353-S1	6412	49896	5070	2579
11:06	MP30353-S2	6402	50099	5030	2581
11:10	MP30353-PS1	6336	49977	5021	2608
11:14	MP30353-SD1	6621	53275	5174	2852
11:18	ZZZZZZ	7729	61435	6146	2699
11:22	ZZZZZZ	7835	63368	5992	2992
11:26	ZZZZZZ	6697	53393	5344	2554
11:30	ZZZZZZ	6375	50659	5163	2492
11:34	MA13165-CCV2	6427	50913	5063	2530
11:38	MA13165-CCB2	6833	55102	5203	3075
11:43	ZZZZZZ	6590	52347	5345	2457
11:47	ZZZZZZ	6460	51857	5328	2439
11:51	ZZZZZZ	6824	55100	5245	3036
11:55	ZZZZZZ	6906	55393	5322	3049
11:59	ZZZZZZ	6876	55268	5257	3048
12:03	ZZZZZZ	6873	54787	5237	3032
12:11	MA13165-CCV3	6409	50854	5042	2522
12:15	MA13165-CCB3	6829	55139	5208	3064
14:02	MA13165-ICV2	6345	50653	5131	2501

INTERNAL STANDARD SUMMARY

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051716M1.ICP Date Analyzed: 05/17/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13165
Parameters: Sb,As,Be,Cu,Pb,Ni,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
14:11	MA13165-CCV4	6377	50374	4985	2501
14:18	MA13165-CCB4	6851	53929	5124	3026
14:22	MP30364-MB1	6750	53017	5068	2970
14:26	MP30364-B1	6552	50377	4919	2611
14:30	FA33973-1	16897 !	126570 !	12966 !	2585
14:34	MP30364-D1	16092 !	119760 !	12232 !	2580
14:39	MP30364-SD1	9135 !	69065 !	6685 !	2784
14:43	MP30364-PS1	16655 !	123430 !	12574 !	2548
14:47	MP30364-S1	17450 !	128040 !	13327 !	2494
14:52	MP30364-S2	16294 !	119830 !	12224 !	2487
14:56	FA33973-2	19225 !	140580 !	14859 !	2373
15:01	ZZZZZZ	6969	51900	4962	2750
15:05	MA13165-CCV5	6639	49708	4880	2520
15:09	MA13165-CCB5	7144	53712	4925	3078
15:13	ZZZZZZ	7129	53610	5032	3043
15:17	ZZZZZZ	6997	52621	4932	2967
15:21	ZZZZZZ	7079	52850	4936	3003
15:25	ZZZZZZ	7156	53160	4968	3026
15:29	ZZZZZZ	7046	52331	4882	2988
15:33	ZZZZZZ	7045	52209	4879	2970
15:37	ZZZZZZ	7111	52908	4962	3007
15:42	ZZZZZZ	7013	52116	4875	2956
15:46	ZZZZZZ	7154	52825	4984	2996
15:50	ZZZZZZ	7158	52513	4928	3008
15:54	MA13165-CCV6	6694	48980	4799	2514
15:58	MA13165-CCB6	7213	53140	4919	3078
16:02	ZZZZZZ	7209	53153	5011	3032
16:06	ZZZZZZ	7017	51741	4846	2941
16:10	ZZZZZZ	7148	53046	4983	3006
16:14	ZZZZZZ	7197	52969	4904	3040
16:18	ZZZZZZ	7201	52298	4849	3024
16:23	ZZZZZZ	7204	52496	4930	3016
16:27	ZZZZZZ	7155	52999	4919	3024

INTERNAL STANDARD SUMMARY

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051716M1.ICP Date Analyzed: 05/17/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13165
Parameters: Sb,As,Be,Cu,Pb,Ni,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
16:31	MA13165-CRIA2	7001	51399	4822	2859
16:35	MA13165-ICSA2	6137	43127	4537	2228
16:39	MA13165-ICSAB2	6119	43482	4556	2196
16:43	MA13165-CCV7	6608	48355	4705	2483
16:47	MA13165-CCB7	7092	52972	4859	3040
16:52	MA13165-CCV8	6639	49034	4742	2505
16:56	MA13165-CCB8	7122	52858	4849	3050

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium (2243)	60-125 %
Istd#2	Yttrium (3600)	60-125 %
Istd#3	Yttrium (3710)	60-125 %
Istd#4	Indium	60-125 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051716M1.ICP Date Analyzed: 05/17/16 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA13165 Units: ug/l

Time:			10:18		10:50		11:38		12:15	
Sample ID:			ICB1		CCB1		CCB2		CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14								
Antimony	20	1	-0.10	<20	-1.0	<20	0.0	<20	0.0	<20
Arsenic	10	1.3	0.60	<10	-0.10	<10	0.80	<10	0.30	<10
Barium	200	1	anr							
Beryllium	5.0	.2	0.50	<5.0	0.10	<5.0	0.50	<5.0	0.40	<5.0
Cadmium	4.0	.2	anr							
Calcium	5000	50								
Chromium	10	1	anr							
Cobalt	50	.2								
Copper	25	1	0.40	<25	0.20	<25	0.80	<25	0.70	<25
Iron	300	17								
Lead	20	1	-0.90	<20	0.10	<20	0.30	<20	-0.60	<20
Magnesium	5000	35								
Manganese	15	.5								
Molybdenum	50	.3								
Nickel	40	.4	0.10	<40	0.10	<40	0.40	<40	0.30	<40
Potassium	10000	200								
Selenium	20	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500								
Strontium	10	.5	anr							
Thallium	10	1.1	anr							
Tin	50	.9								
Titanium	10	.5	anr							
Vanadium	50	.5								
Zinc	20	3	0.20	<20	0.10	<20	0.30	<20	0.20	<20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051716M1.ICP Date Analyzed: 05/17/16 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA13165 Units: ug/l

Time: / Sample ID:			14:18 CCB4		15:09 CCB5		15:58 CCB6		16:47 CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14								
Antimony	20	1	0.80	<20	0.80	<20	1.4	<20	0.60	<20
Arsenic	10	1.3	0.90	<10	0.90	<10	0.70	<10	1.2	<10
Barium	200	1	anr							
Beryllium	5.0	.2	-0.40	<5.0	-0.20	<5.0	-0.40	<5.0	-0.40	<5.0
Cadmium	4.0	.2	anr							
Calcium	5000	50								
Chromium	10	1	anr							
Cobalt	50	.2								
Copper	25	1	-0.50	<25	-0.90	<25	-1.0	<25	-1.1	<25
Iron	300	17								
Lead	20	1	1.0	<20	1.0	<20	0.70	<20	0.60	<20
Magnesium	5000	35								
Manganese	15	.5								
Molybdenum	50	.3								
Nickel	40	.4	-0.10	<40	-0.10	<40	-0.30	<40	-0.20	<40
Potassium	10000	200								
Selenium	20	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500								
Strontium	10	.5	anr							
Thallium	10	1.1	anr							
Tin	50	.9								
Titanium	10	.5	anr							
Vanadium	50	.5								
Zinc	20	3	0.0	<20	0.0	<20	0.0	<20	-0.20	<20

(*) Outside of QC limits
(anr) Analyte not requested

SGS ACCUTEST FA33973

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051716M1.ICP Date Analyzed: 05/17/16 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA13165 Units: ug/l

Time:		10:10			10:40			11:34	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony	2000	2050	102.5	2000	2010	100.5	2000	2040	102.0
Arsenic	2000	2020	101.0	2000	2010	100.5	2000	2050	102.5
Barium	anr								
Beryllium	2000	2090	104.5	2000	1990	99.5	2000	1970	98.5
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper	2000	2030	101.5	2000	2010	100.5	2000	1990	99.5
Iron									
Lead	2000	2050	102.5	2000	1990	99.5	2000	1960	98.0
Magnesium									
Manganese									
Molybdenum									
Nickel	2000	2090	104.5	2000	2030	101.5	2000	2060	103.0
Potassium									
Selenium	anr								
Silver	anr								
Sodium									
Strontium	anr								
Thallium	anr								
Tin									
Titanium	anr								
Vanadium									
Zinc	2000	2080	104.0	2000	2020	101.0	2000	2030	101.5

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051716M1.ICP Date Analyzed: 05/17/16 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA13165 Units: ug/l

Time:		12:11			14:02			14:11	
Sample ID:	CCV	CCV3		ICV	ICV2		CCV	CCV4	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony	2000	2060	103.0	2000	2040	102.0	2000	2010	100.5
Arsenic	2000	2060	103.0	2000	2030	101.5	2000	2010	100.5
Barium	anr								
Beryllium	2000	1970	98.5	2000	2060	103.0	2000	2040	102.0
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper	2000	2000	100.0	2000	2000	100.0	2000	2020	101.0
Iron									
Lead	2000	1980	99.0	2000	2020	101.0	2000	1990	99.5
Magnesium									
Manganese									
Molybdenum									
Nickel	2000	2080	104.0	2000	2080	104.0	2000	2030	101.5
Potassium									
Selenium	anr								
Silver	anr								
Sodium									
Strontium	anr								
Thallium	anr								
Tin									
Titanium	anr								
Vanadium									
Zinc	2000	2040	102.0	2000	2060	103.0	2000	2030	101.5

(*) Outside of QC limits
(anr) Analyte not requested

SGS ACCUTEST FA33973

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051716M1.ICP Date Analyzed: 05/17/16 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA13165 Units: ug/l

Time:		15:05			15:54			16:43	
Sample ID:	CCV	CCV5		CCV	CCV6		CCV	CCV7	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony	2000	1950	97.5	2000	1920	96.0	2000	1960	98.0
Arsenic	2000	1920	96.0	2000	1880	94.0	2000	1930	96.5
Barium	anr								
Beryllium	2000	2060	103.0	2000	2090	104.5	2000	2120	106.0
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper	2000	2080	104.0	2000	2090	104.5	2000	2120	106.0
Iron									
Lead	2000	2050	102.5	2000	2050	102.5	2000	2090	104.5
Magnesium									
Manganese									
Molybdenum									
Nickel	2000	1970	98.5	2000	1930	96.5	2000	1970	98.5
Potassium									
Selenium	anr								
Silver	anr								
Sodium									
Strontium	anr								
Thallium	anr								
Tin									
Titanium	anr								
Vanadium									
Zinc	2000	2020	101.0	2000	2000	100.0	2000	2040	102.0

(*) Outside of QC limits
(anr) Analyte not requested

HIGH STANDARD CHECK SUMMARY

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051716M1.ICP Date Analyzed: 05/17/16 Methods: SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA13165 Units: ug/l

Time:		10:04	
Sample ID:	HSTD	HSTD1	
Metal	True	Results	% Rec
Aluminum			
Antimony	4000	4020	100.5
Arsenic	4000	4020	100.5
Barium	anr		
Beryllium	4000	4000	100.0
Cadmium	anr		
Calcium			
Chromium	anr		
Cobalt			
Copper	4000	4020	100.5
Iron			
Lead	4000	4070	101.8
Magnesium			
Manganese			
Molybdenum			
Nickel	4000	3980	99.5
Potassium			
Selenium	anr		
Silver	anr		
Sodium			
Strontium	anr		
Thallium	anr		
Tin			
Titanium	anr		
Vanadium			
Zinc	4000	4000	100.0

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051716M1.ICP Date Analyzed: 05/17/16 Methods: SW846 6010C
QC Limits: CRI 70-130% CRIA 70-130% Run ID: MA13165 Units: ug/l

Time:			10:21		16:31	
Sample ID:	CRI	CRIA	CRIA1		CRIA2	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	400	200				
Antimony	10	5.0	5.1	102.0	4.1	82.0
Arsenic	20	10	10.1	101.0	9.5	95.0
Barium	400	200	anr			
Beryllium	10	5.0	5.1	102.0	4.6	92.0
Cadmium	10	5.0	anr			
Calcium	2000	1000				
Chromium	20	10	anr			
Cobalt	100	50				
Copper	50	25	26.8	107.2	26.4	105.6
Iron	600	300				
Lead	10	5.0	4.6	92.0	5.6	112.0
Magnesium	10000	5000				
Manganese	30	15				
Molybdenum	100	50				
Nickel	80	40	43.5	108.8	41.2	103.0
Potassium	20000	10000				
Selenium	20	10	anr			
Silver	20	10	anr			
Sodium	20000	10000				
Strontium	20	10	anr			
Thallium	20	10	anr			
Tin	100	50				
Titanium	20	10	anr			
Vanadium	100	50				
Zinc	40	20	21.7	108.5	21.2	106.0

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051716M1.ICP Date Analyzed: 05/17/16 Methods: SW846 6010C
QC Limits: 80 to 120 % Recovery Run ID: MA13165 Units: ug/l

Time:			10:28		10:34		16:35		16:39	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1		ICSA2		ICSAB2	
Metal	True	True	Results	% Rec	Results	% Rec	Results	% Rec	Results	% Rec
Aluminum	500000	500000	515000	103.0	504000	100.8	506000	101.2	490000	98.0
Antimony		1000	0.0		1020	102.0	-2.5		971	97.1
Arsenic		1000	0.10		1100	110.0	0.60		1030	103.0
Barium		500	0.50		536	107.2	-0.20		539	107.8
Beryllium		500	0.0		514	102.8	-0.80		532	106.4
Cadmium		1000	-0.90		987	98.7	-3.2		986	98.6
Calcium	500000	500000	490000	98.0	485000	97.0	480000	96.0	475000	95.0
Chromium		500	0.80		533	106.6	-0.30		519	103.8
Cobalt		500	-0.30		492	98.4	-0.60		489	97.8
Copper		500	0.0		554	110.8	0.20		576	115.2
Iron	200000	200000	183000	91.5	184000	92.0	190000	95.0	191000	95.5
Lead		1000	-0.10		982	98.2	2.1		1020	102.0
Magnesium	500000	500000	520000	104.0	514000	102.8	527000	105.4	518000	103.6
Manganese		500	0.0		529	105.8	-1.3		547	109.4
Molybdenum		1000	-0.10		947	94.7	0.10		918	91.8
Nickel		1000	0.0		993	99.3	0.60		946	94.6
Potassium			267		276		219		201	
Selenium		1000	0.30		1030	103.0	-2.5		968	96.8
Silver		1000	-0.20		1010	101.0	-1.5		1030	103.0
Sodium			294		280		202		203	
Strontium		1000	0.0		1020	102.0	0.0		1080	108.0
Thallium		1000	0.80		968	96.8	0.20		998	99.8
Tin		1000	-0.10		937	93.7	-0.20		851	85.1
Titanium		1000	-0.20		1020	102.0	-1.1		1080	108.0
Vanadium		500	0.10		485	97.0	-0.30		485	97.0
Zinc		1000	-1.6		991	99.1	-1.7		981	98.1

(*) Outside of QC limits
(anr) Analyte not requested

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051816M1.ICP Date Analyzed: 05/18/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13167
Parameters: Sb,As,Be,Cu,Ni,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
09:41	MA13167-STD1	1		STDA
09:45	MA13167-STD2	1		STDB
09:48	MA13167-STD3	1		STDC
09:51	MA13167-STD4	1		STDD
09:56	MA13167-HSTD1	1		
10:01	MA13167-ICV1	1		
10:10	MA13167-ICB1	1		
10:14	MA13167-CRIA1	1		
10:17	MA13167-CRIA2	1		
10:25	MA13167-ICSA1	1		
10:33	MA13167-ICSAB1	1		
10:41	MA13167-CCV1	1		
11:00	MA13167-CCB1	1		
11:06	FA33973-1	10		
11:10	MP30364-D1	10		
11:14	MP30364-S1	10		
11:18	MP30364-S2	10		
11:22	MP30364-PS1	10		
11:26	MP30364-SD1	50		
11:30	FA33973-2	10		
---------->	Last reportable sample/prep for job FA33973			
11:34	ZZZZZZ	20		
11:38	ZZZZZZ	50		
11:42	ZZZZZZ	5		
11:46	MA13167-CCV2	1		
11:50	MA13167-CCB2	1		
11:55	MA13167-CCV3	1		
11:59	MA13167-CCB3	1		
12:09	MP30366-MB1	5		
12:13	MP30366-B1	5		
12:17	FA32306-32R	5		(sample used for QC only; not part of login FA33973)
12:21	MP30366-D1	5		
12:25	MP30366-D2	5		
12:29	MP30366-SD1	25		

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051816M1.ICP Date Analyzed: 05/18/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13167
Parameters: Sb,As,Be,Cu,Ni,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
12:33	MP30366-PS1	5		
12:38	MP30366-S1	5		
12:43	MP30366-S2	5		
12:50	MA13167-CCV4	1		
12:58	MA13167-CCB4	1		
13:03	MP30368-MB1	1		
13:08	MP30368-B1	1		
13:11	FA33957-21	1		(sample used for QC only; not part of login FA33973)
13:16	MP30368-D1	1		
13:20	MP30368-SD1	5		
13:24	MP30368-PS1	1		
13:29	MP30368-S1	1		
13:33	MP30368-S2	1		
13:37	ZZZZZZ	1		
13:42	ZZZZZZ	1		
13:46	MA13167-CCV5	1		
13:50	MA13167-CCB5	1		
14:24	MA13167-ICV2	1		
14:30	MA13167-CCV6	1		
14:38	MA13167-CCB6	1		
14:42	ZZZZZZ	1		
14:46	ZZZZZZ	1		
14:50	ZZZZZZ	1		
14:54	ZZZZZZ	1		
14:59	ZZZZZZ	1		
15:03	ZZZZZZ	1		
15:08	ZZZZZZ	1		
15:12	ZZZZZZ	1		
15:17	ZZZZZZ	1		
15:21	ZZZZZZ	1		
15:25	MA13167-CCV7	1		
15:29	MA13167-CCB7	1		
15:34	ZZZZZZ	1		

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051816M1.ICP Date Analyzed: 05/18/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13167
Parameters: Sb,As,Be,Cu,Ni,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
15:38	ZZZZZZ	1		
15:43	ZZZZZZ	1		
15:47	ZZZZZZ	1		
15:51	ZZZZZZ	1		
15:56	ZZZZZZ	1		
16:00	ZZZZZZ	1		
16:09	MP30369-MB1	1		
16:13	MP30369-B1	1		
16:17	MA13167-CCV8	1		
16:21	MA13167-CCB8	1		
16:25	FA33902-2L	1		(sample used for QC only; not part of login FA33973)
16:29	MP30369-D1	1		
16:34	MP30369-SD1	5		
16:38	MP30369-S1	1		
16:42	MP30369-S2	1		
16:46	ZZZZZZ	1		
16:50	ZZZZZZ	1		
16:55	ZZZZZZ	1		
16:59	MP30369-MB2	1		
17:03	MP30369-B2	1		
17:07	MA13167-CCV9	1		
17:11	MA13167-CCB9	1		
17:15	MP30369-MB3	1		
17:19	MP30369-B3	1		
17:23	MA13167-CRIA3	1		
17:27	MA13167-ICSA2	1		
17:32	MA13167-ICSAB2	1		
17:36	MA13167-CCV10	1		
17:40	MA13167-CCB10	1		

----------> Last reportable CCB for job FA33973
Refer to raw data for calibration curve and standards.

INTERNAL STANDARD SUMMARY

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051816M1.ICP Date Analyzed: 05/18/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13167
Parameters: Sb,As,Be,Cu,Ni,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
09:41	MA13167-STD1	6474	51165	4042	2819
09:45	MA13167-STD2	6351	49632	3987	2621
09:48	MA13167-STD3	6253	49051	4022	2438
09:51	MA13167-STD4	5954	46786	3899	2237
09:56	MA13167-HSTD1	5948	46757	3905	2235
10:01	MA13167-ICV1	6098	47730	3911	2385
10:10	MA13167-ICB1	6398 R	50984 R	4029 R	2804 R
10:14	MA13167-CRIA1	6432	50704	4049	2717
10:17	MA13167-CRIA2				2658
10:25	MA13167-ICSA1	5725	43558	3874	2192
10:33	MA13167-ICSAB1	5736	44624	3909	2191
10:41	MA13167-CCV1	6121	49590	4051	2432
11:00	MA13167-CCB1	6196	51795	4042	2782
11:06	FA33973-1	7335	59969	4782	2648
11:10	MP30364-D1	7256	59027	4701	2667
11:14	MP30364-S1	7497	60969	4889	2673
11:18	MP30364-S2	7168	58064	4631	2623
11:22	MP30364-PS1	7300	59153	4758	2638
11:26	MP30364-SD1	6609	53706	4229	2781
11:30	FA33973-2	7538	60283	4893	2550
11:34	ZZZZZZ	6254	51581	4125	2795
11:38	ZZZZZZ	6276	51166	4006	2776
11:42	ZZZZZZ	5174	39352	3758	1897
11:46	MA13167-CCV2	6027	48687	3948	2395
11:50	MA13167-CCB2	6327	50885	3977	2774
11:55	MA13167-CCV3	5991	47787	3924	2359
11:59	MA13167-CCB3	6304	50382	3944	2766
12:09	MP30366-MB1	6563	52718	4144	2868
12:13	MP30366-B1	6382	51354	4050	2714
12:17	FA32306-32R	6495	51723	4090	2722
12:21	MP30366-D1	6484	51755	4110	2714
12:25	MP30366-D2	6511	51509	4049	2709
12:29	MP30366-SD1	6454	51069	4007	2748

INTERNAL STANDARD SUMMARY

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051816M1.ICP Date Analyzed: 05/18/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13167
Parameters: Sb,As,Be,Cu,Ni,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
12:33	MP30366-PS1	6524	50785	4037	2685
12:38	MP30366-S1	6524	50291	4054	2640
12:43	MP30366-S2	6567	50431	4009	2652
12:50	MA13167-CCV4	6066	47605	3855	2367
12:58	MA13167-CCB4	6401	50372	3912	2773
13:03	MP30368-MB1	6562	51344	4027	2828
13:08	MP30368-B1	6423	49435	3997	2575
13:11	FA33957-21	5825	45228	3969	2222
13:16	MP30368-D1	5826	44995	3949	2224
13:20	MP30368-SD1	6168	47765	3926	2483
13:24	MP30368-PS1	5801	44605	3870	2204
13:29	MP30368-S1	5762	44147	3817	2158
13:33	MP30368-S2	5787	44250	3804	2168
13:37	ZZZZZZ	6121	46159	3918	2250
13:42	ZZZZZZ	6103	47589	3985	2335
13:46	MA13167-CCV5	6057	47480	3819	2365
13:50	MA13167-CCB5	6388	49915	3834	2752
14:24	MA13167-ICV2	6094	46876	3790	2370
14:30	MA13167-CCV6	6085	47352	3808	2363
14:38	MA13167-CCB6	6456	50543	3904	2791
14:42	ZZZZZZ	6140	46344	3900	2256
14:46	ZZZZZZ	6028	46780	3893	2402
14:50	ZZZZZZ	6567	51179	3938	2825
14:54	ZZZZZZ	5883	44386	3874	2159
14:59	ZZZZZZ	6090	45557	4006	2182
15:03	ZZZZZZ	5978	44164	3874	2133
15:08	ZZZZZZ	5829	42601	3818	2054
15:12	ZZZZZZ	5771	43065	3733	2121
15:17	ZZZZZZ	6158	45668	3815	2270
15:21	ZZZZZZ	6091	44902	3986	2100
15:25	MA13167-CCV7	6132	46853	3777	2363
15:29	MA13167-CCB7	6442	49017	3764	2746
15:34	ZZZZZZ	6140	44364	3932	2111

INTERNAL STANDARD SUMMARY

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051816M1.ICP Date Analyzed: 05/18/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13167
Parameters: Sb,As,Be,Cu,Ni,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
15:38	ZZZZZZ	6389	47204	4035	2203
15:43	ZZZZZZ	6037	45346	3730	2313
15:47	ZZZZZZ	6237	47313	3952	2266
15:51	ZZZZZZ	5865	44538	3799	2235
15:56	ZZZZZZ	5536	40787	3651	1978
16:00	ZZZZZZ	5974	43503	3762	2161
16:09	MP30369-MB1	6514	50050	3846	2769
16:13	MP30369-B1	6413	48193	3808	2532
16:17	MA13167-CCV8	6178	46739	3770	2368
16:21	MA13167-CCB8	6458	48819	3715	2744
16:25	FA33902-2L	6205	46472	3757	2488
16:29	MP30369-D1	6203	46561	3757	2494
16:34	MP30369-SD1	6387	48424	3759	2650
16:38	MP30369-S1	6197	46095	3753	2368
16:42	MP30369-S2	6249	46424	3785	2384
16:46	ZZZZZZ	6179	45621	3747	2414
16:50	ZZZZZZ	6225	45714	3717	2462
16:55	ZZZZZZ	6282	46490	3799	2485
16:59	MP30369-MB2	6591	50496	3879	2794
17:03	MP30369-B2	6370	47844	3780	2519
17:07	MA13167-CCV9	6248	47242	3786	2398
17:11	MA13167-CCB9	6418	49251	3782	2739
17:15	MP30369-MB3	6181	46410	3801	2469
17:19	MP30369-B3	6161	46395	3800	2391
17:23	MA13167-CRIA3	6424	49133	3707	2669
17:27	MA13167-ICSA2	5664	42135	3628	2136
17:32	MA13167-ICSAB2	5712	42841	3689	2139
17:36	MA13167-CCV10	6168	47558	3774	2381
17:40	MA13167-CCB10	6425	49061	3778	2742

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium (2243)	60-125 %
Istd#2	Yttrium (3600)	60-125 %
Istd#3	Yttrium (3710)	60-125 %
Istd#4	Indium	60-125 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051816M1.ICP Date Analyzed: 05/18/16 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA13167 Units: ug/l

Time: / Sample ID:			10:10 ICB1		11:00 CCB1		11:50 CCB2		11:59 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	anr							
Antimony	6.0	1	-1.8	<20	-3.0	<20	-1.2	<6.0	-0.90	<6.0
Arsenic	10	1.3	-0.60	<10	-0.80	<10	0.20	<10	-0.60	<10
Barium	200	1	anr							
Beryllium	4.0	.2	-0.40	<5.0	-0.40	<5.0	-0.20	<4.0	-0.20	<4.0
Cadmium	4.0	.2	anr							
Calcium	1000	50	anr							
Chromium	10	1	anr							
Cobalt	50	.2	anr							
Copper	25	1	-0.30	<25	0.30	<25	0.30	<25	0.0	<25
Iron	300	17	anr							
Lead	5.0	1	anr							
Magnesium	5000	35	anr							
Manganese	15	.5	anr							
Molybdenum	50	.3	anr							
Nickel	40	.4	-0.10	<40	-0.20	<40	-0.10	<40	-0.20	<40
Potassium	10000	200	anr							
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500	anr							
Strontium	10	.5	anr							
Thallium	10	1.1	anr							
Tin	50	.9	anr							
Titanium	10	.5	anr							
Vanadium	50	.5	anr							
Zinc	20	3	-0.40	<20	-0.40	<20	-0.30	<20	-0.30	<20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051816M1.ICP Date Analyzed: 05/18/16 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA13167 Units: ug/l

Time:			12:58		13:50		14:38		15:29	
Sample ID:			CCB4		CCB5		CCB6		CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	anr							
Antimony	6.0	1	-2.3	<6.0	-1.3	<6.0	1.0	<6.0	1.6	<6.0
Arsenic	10	1.3	-0.30	<10	0.80	<10	1.0	<10	1.5	<10
Barium	200	1	anr							
Beryllium	4.0	.2	-0.30	<4.0	-0.40	<4.0	0.60	<4.0	0.20	<4.0
Cadmium	4.0	.2	anr							
Calcium	1000	50								
Chromium	10	1	anr							
Cobalt	50	.2								
Copper	25	1	-0.10	<25	-0.40	<25	0.20	<25	-0.10	<25
Iron	300	17	anr							
Lead	5.0	1	anr							
Magnesium	5000	35								
Manganese	15	.5	anr							
Molybdenum	50	.3								
Nickel	40	.4	-0.10	<40	-0.20	<40	0.30	<40	0.0	<40
Potassium	10000	200								
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500								
Strontium	10	.5								
Thallium	10	1.1								
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5								
Zinc	20	3	-0.40	<20	-0.40	<20	0.20	<20	0.10	<20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051816M1.ICP Date Analyzed: 05/18/16 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA13167 Units: ug/l

Time:			16:21		17:11		17:40	
Sample ID:			CCB8		CCB9		CCB10	
Metal	RL	IDL	raw	final	raw	final	raw	final
Aluminum	200	14	anr					
Antimony	6.0	1	1.7	<6.0	2.7	<6.0	2.3	<6.0
Arsenic	10	1.3	1.6	<10	1.5	<10	1.8	<10
Barium	200	1	anr					
Beryllium	4.0	.2	0.50	<4.0	0.50	<4.0	0.50	<4.0
Cadmium	4.0	.2	anr					
Calcium	1000	50						
Chromium	10	1	anr					
Cobalt	50	.2						
Copper	25	1	-0.10	<25	0.10	<25	0.0	<25
Iron	300	17	anr					
Lead	5.0	1	anr					
Magnesium	5000	35						
Manganese	15	.5	anr					
Molybdenum	50	.3						
Nickel	40	.4	0.10	<40	0.10	<40	0.10	<40
Potassium	10000	200						
Selenium	10	2.4	anr					
Silver	10	.7	anr					
Sodium	10000	500						
Strontium	10	.5						
Thallium	10	1.1						
Tin	50	.9						
Titanium	10	.5						
Vanadium	50	.5						
Zinc	20	3	0.10	<20	0.10	<20	0.10	<20

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051816M1.ICP Date Analyzed: 05/18/16 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA13167 Units: ug/l

Time:		10:01			10:41			11:46	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	2000	2050	102.5	2000	1990	99.5	2000	2030	101.5
Arsenic	2000	2030	101.5	2000	2000	100.0	2000	2040	102.0
Barium	anr								
Beryllium	2000	2090	104.5	2000	1930	96.5	2000	1970	98.5
Cadmium	anr								
Calcium	anr								
Chromium	anr								
Cobalt	anr								
Copper	2000	2040	102.0	2000	1930	96.5	2000	1960	98.0
Iron	anr								
Lead	anr								
Magnesium	anr								
Manganese	anr								
Molybdenum	anr								
Nickel	2000	2090	104.5	2000	2010	100.5	2000	2050	102.5
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium	anr								
Thallium	anr								
Tin	anr								
Titanium	anr								
Vanadium	anr								
Zinc	2000	2070	103.5	2000	1970	98.5	2000	2000	100.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051816M1.ICP Date Analyzed: 05/18/16 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA13167 Units: ug/l

Time:		11:55			12:50			13:46	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	2000	2040	102.0	2000	2030	101.5	2000	2040	102.0
Arsenic	2000	2040	102.0	2000	2030	101.5	2000	2040	102.0
Barium	anr								
Beryllium	2000	2010	100.5	2000	2040	102.0	2000	2040	102.0
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper	2000	2000	100.0	2000	2030	101.5	2000	2030	101.5
Iron	anr								
Lead	anr								
Magnesium									
Manganese	anr								
Molybdenum									
Nickel	2000	2060	103.0	2000	2050	102.5	2000	2060	103.0
Potassium									
Selenium	anr								
Silver	anr								
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc	2000	2030	101.5	2000	2040	102.0	2000	2050	102.5

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051816M1.ICP Date Analyzed: 05/18/16 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA13167 Units: ug/l

Time:		14:24			14:30			15:25	
Sample ID:	ICV	ICV2		CCV	CCV6		CCV	CCV7	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	2000	2040	102.0	2000	2010	100.5	2000	2000	100.0
Arsenic	2000	2020	101.0	2000	2010	100.5	2000	2000	100.0
Barium	anr								
Beryllium	2000	2100	105.0	2000	2030	101.5	2000	2040	102.0
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper	2000	2040	102.0	2000	2020	101.0	2000	2040	102.0
Iron	anr								
Lead	anr								
Magnesium									
Manganese	anr								
Molybdenum									
Nickel	2000	2080	104.0	2000	2040	102.0	2000	2020	101.0
Potassium									
Selenium	anr								
Silver	anr								
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc	2000	2080	104.0	2000	2040	102.0	2000	2050	102.5

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051816M1.ICP Date Analyzed: 05/18/16 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA13167 Units: ug/l

Time:		16:17			17:07			17:36	
Sample ID:	CCV	CCV8		CCV	CCV9		CCV	CCV10	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	2000	1970	98.5	2000	1960	98.0	2000	1980	99.0
Arsenic	2000	1960	98.0	2000	1950	97.5	2000	1980	99.0
Barium	anr								
Beryllium	2000	2040	102.0	2000	2020	101.0	2000	2000	100.0
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper	2000	2050	102.5	2000	2030	101.5	2000	2010	100.5
Iron	anr								
Lead	anr								
Magnesium									
Manganese	anr								
Molybdenum									
Nickel	2000	2000	100.0	2000	1980	99.0	2000	2010	100.5
Potassium									
Selenium	anr								
Silver	anr								
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc	2000	2030	101.5	2000	2020	101.0	2000	2030	101.5

(*) Outside of QC limits
(anr) Analyte not requested

HIGH STANDARD CHECK SUMMARY

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051816M1.ICP Date Analyzed: 05/18/16 Methods: SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA13167 Units: ug/l

Time:		09:56	
Sample ID:	HSTD	HSTD1	
Metal	True	Results	% Rec
Aluminum	anr		
Antimony	4000	4000	100.0
Arsenic	4000	3990	99.8
Barium	anr		
Beryllium	4000	3990	99.8
Cadmium	anr		
Calcium	anr		
Chromium	anr		
Cobalt	anr		
Copper	4000	4000	100.0
Iron	anr		
Lead	anr		
Magnesium	anr		
Manganese	anr		
Molybdenum	anr		
Nickel	4000	3960	99.0
Potassium	anr		
Selenium	anr		
Silver	anr		
Sodium	anr		
Strontium	anr		
Thallium	anr		
Tin	anr		
Titanium	anr		
Vanadium	anr		
Zinc	4000	3970	99.3

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051816M1.ICP Date Analyzed: 05/18/16 Methods: SW846 6010C
QC Limits: CRI 70-130% CRIA 70-130% Run ID: MA13167 Units: ug/l

Time:			10:14		10:17		17:23	
Sample ID:	CRI	CRIA	CRIA1		CRIA2		CRIA3	
Metal	True	True	Results	% Rec	Results	% Rec	Results	% Rec
Aluminum	400	200	anr					
Antimony	10	5.0	4.1	82.0			5.6	112.0
Arsenic	20	10	9.7	97.0			10.6	106.0
Barium	400	200	anr					
Beryllium	10	5.0	4.6	92.0			5.5	110.0
Cadmium	10	5.0	anr					
Calcium	2000	1000	anr					
Chromium	20	10	anr					
Cobalt	100	50	anr					
Copper	50	25	26.1	104.4			26.3	105.2
Iron	600	300	anr					
Lead	10	5.0						
Magnesium	10000	5000	anr					
Manganese	30	15	anr					
Molybdenum	100	50	anr					
Nickel	80	40	42.6	106.5			42.7	106.8
Potassium	20000	10000	anr					
Selenium	20	10	anr					
Silver	20	10	anr					
Sodium	20000	10000	anr					
Strontium	20	10	anr					
Thallium	20	10	anr					
Tin	100	50	anr					
Titanium	20	10	anr					
Vanadium	100	50	anr					
Zinc	40	20	21.1	105.5			21.6	108.0

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051816M1.ICP Date Analyzed: 05/18/16 Methods: SW846 6010C
QC Limits: 80 to 120 % Recovery Run ID: MA13167 Units: ug/l

Time:			10:25		10:33		17:27		17:32	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1		ICSA2		ICSAB2	
Metal	True	True	Results	% Rec	Results	% Rec	Results	% Rec	Results	% Rec
Aluminum	500000	500000	488000	97.6	463000	92.6	510000	102.0	485000	97.0
Antimony		1000	0.0		1010	101.0	2.3		1020	102.0
Arsenic		1000	0.0		1080	108.0	2.2		1090	109.0
Barium		500	-0.20		520	104.0	0.80		528	105.6
Beryllium		500	-0.50		493	98.6	0.20		508	101.6
Cadmium		1000	0.0		954	95.4	-0.30		982	98.2
Calcium	500000	500000	461000	92.2	451000	90.2	485000	97.0	480000	96.0
Chromium		500	0.70		495	99.0	1.0		531	106.2
Cobalt		500	-0.50		478	95.6	-0.10		490	98.0
Copper		500	0.0		525	105.0	-0.60		548	109.6
Iron	200000	200000	180000	90.0	178000	89.0	183000	91.5	184000	92.0
Lead		1000	0.10		938	93.8	-5.9		979	97.9
Magnesium	500000	500000	503000	100.6	494000	98.8	514000	102.8	505000	101.0
Manganese		500	0.0		503	100.6	0.40		524	104.8
Molybdenum		1000	-1.0		915	91.5	0.70		932	93.2
Nickel		1000	0.0		974	97.4	0.40		985	98.5
Potassium			132		197		241		204	
Selenium		1000	0.0		1020	102.0	-1.2		1030	103.0
Silver		1000	-0.20		974	97.4	-0.60		1010	101.0
Sodium			222		271		357		260	
Strontium		1000	0.10		971	97.1	0.40		999	99.9
Thallium		1000	1.8		936	93.6	2.4		971	97.1
Tin		1000	-0.50		931	93.1	0.40		924	92.4
Titanium		1000	-0.80		959	95.9	0.30		1010	101.0
Vanadium		500	0.40		463	92.6	0.60		479	95.8
Zinc		1000	-1.6		954	95.4	-1.3		983	98.3

(*) Outside of QC limits
(anr) Analyte not requested

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051916M1.ICP Date Analyzed: 05/19/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13171
Parameters: Sb,As,Be,Cu,Pb,Ni,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
09:50	MA13171-STD1	1		STDA
09:55	MA13171-STD2	1		STDB
09:59	MA13171-STD3	1		STDC
10:02	MA13171-STD4	1		STDD
10:16	MA13171-HSTD1	1		
10:23	MA13171-ICV1	1		
10:28	MA13171-ICB1	1		
10:33	MA13171-CRIA1	1		
10:38	MA13171-ICSA1	1		
10:45	MA13171-ICSAB1	1		
10:51	MA13171-CCV1	1		
10:58	MA13171-CCB1	1		
11:02	FA33957-21	4		(sample used for QC only; not part of login FA33973)
11:07	MP30368-D1	4		
11:11	MP30368-S1	4		
11:15	MP30368-S2	4		
11:19	MP30368-PS1	4		
11:23	MP30368-SD1	20		
11:27	ZZZZZZ	2		
11:32	ZZZZZZ	2		
11:36	ZZZZZZ	2		
11:40	ZZZZZZ	2		
11:45	MA13171-CCV2	1		
11:49	MA13171-CCB2	1		
11:53	MP30372-MB1	1		
11:57	MP30372-B1	1		
12:01	FA34039-1	1		(sample used for QC only; not part of login FA33973)
12:05	MP30372-D1	1		
12:09	MP30372-SD1	5		
12:13	MP30372-PS1	1		
12:17	MP30372-S1	1		
12:21	MP30372-S2	1		
12:25	ZZZZZZ	1		

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051916M1.ICP Date Analyzed: 05/19/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13171
Parameters: Sb,As,Be,Cu,Pb,Ni,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
12:29	ZZZZZZ	1		
12:34	MA13171-CCV3	1		
12:37	MA13171-CCB3	1		
12:42	ZZZZZZ	1		
12:46	ZZZZZZ	1		
12:50	ZZZZZZ	1		
12:54	ZZZZZZ	1		
12:59	ZZZZZZ	1		
13:03	ZZZZZZ	1		
13:08	ZZZZZZ	1		
13:12	ZZZZZZ	1		
13:16	ZZZZZZ	1		
13:20	ZZZZZZ	1		
13:25	MA13171-CCV4	1		
13:29	MA13171-CCB4	1		
13:53	MA13171-ICV2	1		
14:00	MA13171-CCV5	1		
14:08	MA13171-CCB5	1		
14:12	ZZZZZZ	1		
14:16	ZZZZZZ	1		
14:20	ZZZZZZ	1		
14:24	ZZZZZZ	1		
14:28	ZZZZZZ	1		
14:33	ZZZZZZ	1		
14:37	ZZZZZZ	5		
14:41	MP30374-MB1	1		
14:45	MP30374-B1	1		
---------->	Last reportable sample/prep for job FA33973			
14:54	MA13171-CCV6	1		
14:58	MA13171-CCB6	1		
---------->	Last reportable CCB for job FA33973			
15:45	MA13171-CCV7	1		
15:49	MA13171-CCB7	1		

Refer to raw data for calibration curve and standards.

INTERNAL STANDARD SUMMARY

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051916M1.ICP Date Analyzed: 05/19/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13171
Parameters: Sb,As,Be,Cu,Pb,Ni,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
09:50	MA13171-STD1	6183	54446	5341	2730
09:55	MA13171-STD2	6089	54261	5459	2590
09:59	MA13171-STD3	5908	52071	5449	2375
10:02	MA13171-STD4	5666	51019	5311	2196
10:16	MA13171-HSTD1	5594	51254	5337	2185
10:23	MA13171-ICV1	5750	52384	5413	2339
10:28	MA13171-ICB1	6087 R	54875 R	5462 R	2730 R
10:33	MA13171-CRIA1	5994	54093	5417	2626
10:38	MA13171-ICSA1	5404	47106	5214	2103
10:45	MA13171-ICSAB1	5312	47365	5239	2064
10:51	MA13171-CCV1	5736	52145	5325	2315
10:58	MA13171-CCB1	6004	53675	5241	2669
11:02	FA33957-21	5705	50521	5269	2375
11:07	MP30368-D1	5719	50825	5267	2383
11:11	MP30368-S1	5589	50080	5204	2321
11:15	MP30368-S2	5660	50690	5298	2342
11:19	MP30368-PS1	5670	50679	5320	2374
11:23	MP30368-SD1	5953	53826	5407	2606
11:27	ZZZZZZ	5608	49049	5332	2118
11:32	ZZZZZZ	5766	51426	5471	2193
11:36	ZZZZZZ	5465	49423	5268	2192
11:40	ZZZZZZ	5607	50054	5385	2207
11:45	MA13171-CCV2	5681	52177	5388	2314
11:49	MA13171-CCB2	5882	54324	5371	2671
11:53	MP30372-MB1	5960	55499	5464	2699
11:57	MP30372-B1	5795	52721	5344	2443
12:01	FA34039-1	5927	54393	5470	2611
12:05	MP30372-D1	5966	54382	5417	2622
12:09	MP30372-SD1	6024	54590	5436	2690
12:13	MP30372-PS1	5917	53636	5413	2533
12:17	MP30372-S1	5832	52655	5381	2414
12:21	MP30372-S2	5839	52154	5319	2410
12:25	ZZZZZZ	5990	54050	5347	2613

INTERNAL STANDARD SUMMARY

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051916M1.ICP Date Analyzed: 05/19/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13171
Parameters: Sb,As,Be,Cu,Pb,Ni,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
12:29	ZZZZZZ	6007	53725	5355	2615
12:34	MA13171-CCV3	5710	50870	5253	2295
12:37	MA13171-CCB3	5987	53289	5311	2658
12:42	ZZZZZZ	5843	51788	5276	2471
12:46	ZZZZZZ	5867	52153	5267	2475
12:50	ZZZZZZ	6010	53646	5304	2635
12:54	ZZZZZZ	5143	45314	4976	2036
12:59	ZZZZZZ	5229	46424	5091	2080
13:03	ZZZZZZ	5207	46350	5108	2075
13:08	ZZZZZZ	5213	46181	5020	2086
13:12	ZZZZZZ	5954	54320	5348	2667
13:16	ZZZZZZ	5871	52767	5289	2467
13:20	ZZZZZZ	5957	54312	5334	2665
13:25	MA13171-CCV4	5681	51711	5298	2302
13:29	MA13171-CCB4	5890	53166	5232	2635
13:53	MA13171-ICV2	5710	50125	5172	2285
14:00	MA13171-CCV5	5750	50711	5255	2293
14:08	MA13171-CCB5	5947	52762	5192	2634
14:12	ZZZZZZ	5737	50963	5231	2425
14:16	ZZZZZZ	5765	50791	5175	2420
14:20	ZZZZZZ	5666	49443	5154	2366
14:24	ZZZZZZ	5506	47743	5122	2251
14:28	ZZZZZZ	5212	45425	5019	2057
14:33	ZZZZZZ	5803	50721	5193	2420
14:37	ZZZZZZ	5742	50519	5200	2415
14:41	MP30374-MB1	6020	53566	5279	2670
14:45	MP30374-B1	5814	51112	5181	2410
14:54	MA13171-CCV6	5762	50764	5189	2305
14:58	MA13171-CCB6	5958	52534	5121	2625
15:45	MA13171-CCV7	5875	49980	5035	2304
15:49	MA13171-CCB7	6079	51411	4905	2614

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium (2243)	60-125 %

INTERNAL STANDARD SUMMARY

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051916M1.ICP Date Analyzed: 05/19/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13171
Parameters: Sb,As,Be,Cu,Pb,Ni,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4

Istd#4	Yttrium (3600)	60-125 %
Istd#3	Yttrium (3710)	60-125 %
Istd#4	Indium	60-125 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051916M1.ICP Date Analyzed: 05/19/16 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA13171 Units: ug/l

Time: / Sample ID:			10:28 ICB1		10:58 CCB1		11:49 CCB2		12:37 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	anr							
Antimony	6.0	1	0.10	<6.0	0.0	<6.0	-0.50	<6.0	0.0	<6.0
Arsenic	10	1.3	0.60	<10	0.40	<10	0.70	<10	1.3	<10
Barium	200	1	anr							
Beryllium	4.0	.2	0.30	<4.0	0.50	<4.0	0.50	<4.0	0.10	<4.0
Cadmium	5.0	.2	anr							
Calcium	1000	50	anr							
Chromium	10	1	anr							
Cobalt	50	.2	anr							
Copper	25	1	0.20	<25	0.50	<25	0.40	<25	0.10	<25
Iron	300	17	anr							
Lead	5.0	1	0.10	<5.0	-0.30	<5.0	-0.90	<5.0	0.20	<5.0
Magnesium	5000	35	anr							
Manganese	15	.5	anr							
Molybdenum	50	.3								
Nickel	40	.4	0.10	<40	0.10	<40	0.30	<40	0.10	<40
Potassium	10000	200	anr							
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500	anr							
Strontium	10	.5								
Thallium	10	1.1	anr							
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5	anr							
Zinc	20	3	0.0	<20	0.0	<20	0.0	<20	0.0	<20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051916M1.ICP Date Analyzed: 05/19/16 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA13171 Units: ug/l

Time:			13:29		14:08		14:58	
Sample ID:			CCB4		CCB5		CCB6	
Metal	RL	IDL	raw	final	raw	final	raw	final
Aluminum	200	14	anr					
Antimony	6.0	1	-0.70	<6.0	1.1	<6.0	1.9	<6.0
Arsenic	10	1.3	0.20	<10	-0.40	<10	0.50	<10
Barium	200	1	anr					
Beryllium	4.0	.2	0.30	<4.0	0.40	<4.0	0.10	<4.0
Cadmium	5.0	.2	anr					
Calcium	1000	50	anr					
Chromium	10	1	anr					
Cobalt	50	.2	anr					
Copper	25	1	0.20	<25	0.20	<25	0.30	<25
Iron	300	17	anr					
Lead	5.0	1	0.50	<5.0	1.0	<5.0	0.20	<5.0
Magnesium	5000	35	anr					
Manganese	15	.5	anr					
Molybdenum	50	.3						
Nickel	40	.4	0.10	<40	0.0	<40	-0.10	<40
Potassium	10000	200	anr					
Selenium	10	2.4	anr					
Silver	10	.7	anr					
Sodium	10000	500	anr					
Strontium	10	.5						
Thallium	10	1.1	anr					
Tin	50	.9						
Titanium	10	.5						
Vanadium	50	.5	anr					
Zinc	20	3	0.0	<20	0.0	<20	-0.10	<20

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051916M1.ICP Date Analyzed: 05/19/16 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA13171 Units: ug/l

Time:		10:23			10:51			11:45	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	2000	2070	103.5	2000	2040	102.0	2000	2050	102.5
Arsenic	2000	2060	103.0	2000	2050	102.5	2000	2070	103.5
Barium	anr								
Beryllium	2000	2090	104.5	2000	2030	101.5	2000	2020	101.0
Cadmium	anr								
Calcium	anr								
Chromium	anr								
Cobalt	anr								
Copper	2000	2020	101.0	2000	2010	100.5	2000	2010	100.5
Iron	anr								
Lead	2000	2050	102.5	2000	2020	101.0	2000	2000	100.0
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	2000	2110	105.5	2000	2070	103.5	2000	2080	104.0
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	2000	2090	104.5	2000	2060	103.0	2000	2050	102.5

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051916M1.ICP Date Analyzed: 05/19/16 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA13171 Units: ug/l

Time:		12:34			13:25			13:53	
Sample ID:	CCV	CCV3		CCV	CCV4		ICV	ICV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	2000	2050	102.5	2000	2060	103.0	2000	2040	102.0
Arsenic	2000	2060	103.0	2000	2080	104.0	2000	2020	101.0
Barium	anr								
Beryllium	2000	2090	104.5	2000	2050	102.5	2000	2100	105.0
Cadmium	anr								
Calcium	anr								
Chromium	anr								
Cobalt	anr								
Copper	2000	2060	103.0	2000	2020	101.0	2000	2020	101.0
Iron	anr								
Lead	2000	2050	102.5	2000	2020	101.0	2000	2040	102.0
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	2000	2080	104.0	2000	2090	104.5	2000	2070	103.5
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	2000	2080	104.0	2000	2070	103.5	2000	2080	104.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051916M1.ICP Date Analyzed: 05/19/16 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA13171 Units: ug/l

Time:		14:00			14:54	
Sample ID:	CCV	CCV5		CCV	CCV6	
Metal	True	Results	% Rec	True	Results	% Rec
Aluminum	anr					
Antimony	2000	1990	99.5	2000	2000	100.0
Arsenic	2000	1990	99.5	2000	2010	100.5
Barium	anr					
Beryllium	2000	2020	101.0	2000	2020	101.0
Cadmium	anr					
Calcium	anr					
Chromium	anr					
Cobalt	anr					
Copper	2000	2010	100.5	2000	2010	100.5
Iron	anr					
Lead	2000	2000	100.0	2000	2000	100.0
Magnesium	anr					
Manganese	anr					
Molybdenum						
Nickel	2000	2020	101.0	2000	2030	101.5
Potassium	anr					
Selenium	anr					
Silver	anr					
Sodium	anr					
Strontium						
Thallium	anr					
Tin						
Titanium						
Vanadium	anr					
Zinc	2000	2030	101.5	2000	2040	102.0

(*) Outside of QC limits
(anr) Analyte not requested

HIGH STANDARD CHECK SUMMARY

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051916M1.ICP Date Analyzed: 05/19/16 Methods: SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA13171 Units: ug/l

Time:		10:16	
Sample ID:	HSTD	HSTD1	
Metal	True	Results	% Rec
Aluminum	anr		
Antimony	4000	4060	101.5
Arsenic	4000	4070	101.8
Barium	anr		
Beryllium	4000	3970	99.3
Cadmium	anr		
Calcium	anr		
Chromium	anr		
Cobalt	anr		
Copper	4000	3960	99.0
Iron	anr		
Lead	4000	4040	101.0
Magnesium	anr		
Manganese	anr		
Molybdenum			
Nickel	4000	4020	100.5
Potassium	anr		
Selenium	anr		
Silver	anr		
Sodium	anr		
Strontium			
Thallium	anr		
Tin			
Titanium			
Vanadium	anr		
Zinc	4000	4000	100.0

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051916M1.ICP Date Analyzed: 05/19/16 Methods: SW846 6010C
QC Limits: CRI 70-130% CRIA 70-130% Run ID: MA13171 Units: ug/l

Time:			10:33	
Sample ID:	CRI	CRIA	CRIA1	
Metal	True	True	Results	% Rec
Aluminum	400	200	anr	
Antimony	10	5.0	4.5	90.0
Arsenic	20	10	10.3	103.0
Barium	400	200	anr	
Beryllium	10	5.0	5.3	106.0
Cadmium	10	5.0	anr	
Calcium	2000	1000	anr	
Chromium	20	10	anr	
Cobalt	100	50	anr	
Copper	50	25	26.6	106.4
Iron	600	300	anr	
Lead	10	5.0	4.6	92.0
Magnesium	10000	5000	anr	
Manganese	30	15	anr	
Molybdenum	100	50		
Nickel	80	40	43.6	109.0
Potassium	20000	10000	anr	
Selenium	20	10	anr	
Silver	20	10	anr	
Sodium	20000	10000	anr	
Strontium	20	10		
Thallium	20	10	anr	
Tin	100	50		
Titanium	20	10		
Vanadium	100	50	anr	
Zinc	40	20	21.6	108.0

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB051916M1.ICP Date Analyzed: 05/19/16 Methods: SW846 6010C
QC Limits: 80 to 120 % Recovery Run ID: MA13171 Units: ug/l

Time:			10:38		10:45	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	500000	500000	501000	100.2	480000	96.0
Antimony		1000	0.0		1040	104.0
Arsenic		1000	-0.10		1110	111.0
Barium		500	0.70		536	107.2
Beryllium		500	0.10		505	101.0
Cadmium		1000	0.0		983	98.3
Calcium	500000	500000	467000	93.4	464000	92.8
Chromium		500	0.90		509	101.8
Cobalt		500	-0.20		492	98.4
Copper		500	0.0		544	108.8
Iron	200000	200000	179000	89.5	180000	90.0
Lead		1000	-0.20		979	97.9
Magnesium	500000	500000	510000	102.0	509000	101.8
Manganese		500	0.50		516	103.2
Molybdenum		1000	-0.10		936	93.6
Nickel		1000	0.0		997	99.7
Potassium			50.6		54.6	
Selenium		1000	-0.10		1040	104.0
Silver		1000	-0.10		1010	101.0
Sodium			174		175	
Strontium		1000	0.10		990	99.0
Thallium		1000	0.0		965	96.5
Tin		1000	0.60		948	94.8
Titanium		1000	0.50		982	98.2
Vanadium		500	0.70		473	94.6
Zinc		1000	-1.3		979	97.9

(*) Outside of QC limits
(anr) Analyte not requested

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SA052016M1.ICP Date Analyzed: 05/20/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13172
Parameters: Sb,As,Be,Cu,Pb,Ni,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
08:53	MA13172-STD1	1		STDA
08:57	MA13172-STD2	1		STDB
09:02	MA13172-STD3	1		STDC
09:06	MA13172-STD4	1		STDD
09:10	MA13172-HSTD1	1		
09:17	MA13172-ICV1	1		
09:24	MA13172-ICB1	1		
09:34	MA13172-CRIA1	1		
09:42	MA13172-ICSA1	1		
09:47	MA13172-ICSAB1	1		
09:54	MA13172-CCV1	1		
10:00	MA13172-CCB1	1		
10:04	ZZZZZZ	2		
10:09	FA34018-1	10		(sample used for QC only; not part of login FA33973)
10:13	MP30374-D1	10		
10:18	MP30374-S1	10		
10:22	MP30374-S2	10		
10:26	MP30374-PS1	10		
10:31	MP30374-SD1	50		
10:35	ZZZZZZ	10		
10:40	ZZZZZZ	10		
10:44	ZZZZZZ	10		
10:48	MA13172-CCV2	1		
10:53	MA13172-CCB2	1		
10:57	ZZZZZZ	10		
11:02	ZZZZZZ	10		
11:06	ZZZZZZ	10		
11:10	ZZZZZZ	1		
11:15	ZZZZZZ	1		
11:19	ZZZZZZ	1		
11:24	ZZZZZZ	1		
11:28	ZZZZZZ	1		
11:32	ZZZZZZ	1		

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SA052016M1.ICP Date Analyzed: 05/20/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13172
Parameters: Sb,As,Be,Cu,Pb,Ni,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
11:37	FA33973-3	1		
---------->	Last reportable sample/prep for job FA33973			
11:41	MA13172-CCV3	1		
11:45	MA13172-CCB3	1		
11:50	ZZZZZZ	1		
11:55	ZZZZZZ	10		
11:59	ZZZZZZ	10		
12:04	ZZZZZZ	10		
12:08	MP30375-MB1	1		
12:13	MP30375-B1	1		
12:17	FA34064-1	1		(sample used for QC only; not part of login FA33973)
12:22	MP30375-D1	1		
12:26	MP30375-SD1	5		
12:31	MP30375-PS1	1		
12:35	MA13172-CCV4	1		
12:39	MA13172-CCB4	1		
12:44	MP30375-S1	1		
12:48	MP30375-S2	1		
12:52	ZZZZZZ	1		
12:57	ZZZZZZ	1		
13:01	ZZZZZZ	1		
13:06	ZZZZZZ	1		
13:10	ZZZZZZ	1		
13:15	ZZZZZZ	1		
13:19	ZZZZZZ	1		
13:24	ZZZZZZ	1		
13:28	MA13172-CCV5	1		
13:32	MA13172-CCB5	1		
14:04	MA13172-CCV6	1		
14:16	MA13172-CCB6	1		
14:21	ZZZZZZ	1		
14:25	ZZZZZZ	1		
14:30	ZZZZZZ	1		
14:34	ZZZZZZ	1		

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SA052016M1.ICP Date Analyzed: 05/20/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13172
Parameters: Sb,As,Be,Cu,Pb,Ni,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
14:39	ZZZZZZ	1		
14:43	ZZZZZZ	1		
14:48	ZZZZZZ	1		
14:52	ZZZZZZ	1		
14:57	ZZZZZZ	1		
15:01	ZZZZZZ	1		
15:06	MA13172-CCV7	1		
15:10	MA13172-CCB7	1		
15:15	ZZZZZZ	1		
15:19	MP30376-MB1	1		
15:24	MP30376-B1	1		
15:28	MP30376-B2	1		
15:32	ZZZZZZ	1		
15:37	ZZZZZZ	1		
15:41	MP30377-MB1	1		
15:46	MP30377-B1	1		
15:59	MA13172-CCV8	1		
16:03	MA13172-CCB8	1		
16:30	ZZZZZZ	1		
16:34	ZZZZZZ	1		
16:39	ZZZZZZ	1		
16:43	ZZZZZZ	5		
16:48	ZZZZZZ	5		
16:52	MA13172-CCV9	1		
16:56	MA13172-CCB9	1		
17:27	ZZZZZZ	5		
17:36	MA13172-CRIA2	1		
17:41	MA13172-ICSA2	1		
17:45	MA13172-CCV10	1		
17:49	MA13172-CCB10	1		
17:54	MA13172-ICSAB2	1		
17:59	MA13172-CCV11	1		
18:03	MA13172-CCB11	1		
---------->	Last reportable CCB for job FA33973			
	Refer to raw data for calibration curve and standards.			

INTERNAL STANDARD SUMMARY

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SA052016M1.ICP Date Analyzed: 05/20/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13172
Parameters: Sb,As,Be,Cu,Pb,Ni,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
08:53	MA13172-STD1	4887	39688	3605	2649
08:57	MA13172-STD2	4806	38629	3575	2466
09:02	MA13172-STD3	4627	37473	3514	2239
09:06	MA13172-STD4	4452	36461	3470	2065
09:10	MA13172-HSTD1	4409	36259	3410	2051
09:17	MA13172-ICV1	4541	36633	3417	2203
09:24	MA13172-ICB1	4826 R	39266 R	3560 R	2605 R
09:34	MA13172-CRIA1	4732	37910	3489	2473
09:42	MA13172-ICSA1	4230	32703	3200	1955
09:47	MA13172-ICSAB1	4225	33270	3271	1940
09:54	MA13172-CCV1	4600	37386	3508	2242
10:00	MA13172-CCB1	4841	39370	3631	2647
10:04	ZZZZZZ	4338	35286	3495	2160
10:09	FA34018-1	5370	43796	4027	2536
10:13	MP30374-D1	5303	43289	3990	2550
10:18	MP30374-S1	5266	42649	4004	2483
10:22	MP30374-S2	5274	42818	4019	2495
10:26	MP30374-PS1	5281	42696	4002	2487
10:31	MP30374-SD1	4908	40234	3693	2596
10:35	ZZZZZZ	5339	43760	4072	2525
10:40	ZZZZZZ	5209	42617	3958	2524
10:44	ZZZZZZ	5278	42951	3976	2546
10:48	MA13172-CCV2	4480	36649	3508	2198
10:53	MA13172-CCB2	4750	39284	3633	2610
10:57	ZZZZZZ	5318	43670	4044	2521
11:02	ZZZZZZ	5227	42510	3904	2488
11:06	ZZZZZZ	5226	42707	3922	2498
11:10	ZZZZZZ	5487	44799	4168	2427
11:15	ZZZZZZ	5074	41209	3790	2462
11:19	ZZZZZZ	5141	42216	3842	2518
11:24	ZZZZZZ	5030	41014	3719	2526
11:28	ZZZZZZ	4857	40106	3618	2589
11:32	ZZZZZZ	5399	43865	3977	2435

INTERNAL STANDARD SUMMARY

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SA052016M1.ICP Date Analyzed: 05/20/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13172
Parameters: Sb,As,Be,Cu,Pb,Ni,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
11:37	FA33973-3	27173 !	220000 !	20572 !	2259
11:41	MA13172-CCV3	4664	37743	3544	2254
11:45	MA13172-CCB3	4810	39133	3553	2599
11:50	ZZZZZZ	5175	41783	4090	1819
11:55	ZZZZZZ	4319	39703	3581	2398
11:59	ZZZZZZ	4377	39308	3606	2423
12:04	ZZZZZZ	4804	39452	3625	2570
12:08	MP30375-MB1	4802	39697	3607	2616
12:13	MP30375-B1	4640	37715	3486	2347
12:17	FA34064-1	4558	37498	3555	2423
12:22	MP30375-D1	4623	37801	3553	2455
12:26	MP30375-SD1	4809	39496	3641	2611
12:31	MP30375-PS1	4604	37445	3525	2385
12:35	MA13172-CCV4	4586	37202	3525	2237
12:39	MA13172-CCB4	4864	39619	3613	2649
12:44	MP30375-S1	4548	36938	3454	2255
12:48	MP30375-S2	4578	37247	3440	2270
12:52	ZZZZZZ	4529	36647	3478	2379
12:57	ZZZZZZ	4597	37951	3572	2399
13:01	ZZZZZZ	4567	37491	3499	2403
13:06	ZZZZZZ	4621	37532	3533	2439
13:10	ZZZZZZ	4506	36520	3528	2338
13:15	ZZZZZZ	4507	36762	3470	2330
13:19	ZZZZZZ	4462	36404	3484	2325
13:24	ZZZZZZ	4693	38573	3596	2530
13:28	MA13172-CCV5	4532	37038	3520	2207
13:32	MA13172-CCB5	4726	38717	3512	2569
14:04	MA13172-CCV6	4675	37561	3500	2254
14:16	MA13172-CCB6	4792	38622	3474	2585
14:21	ZZZZZZ	4848	39168	3542	2540
14:25	ZZZZZZ	4628	37231	3476	2272
14:30	ZZZZZZ	4619	36668	3368	2346
14:34	ZZZZZZ	4705	37753	3497	2387

INTERNAL STANDARD SUMMARY

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SA052016M1.ICP Date Analyzed: 05/20/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13172
Parameters: Sb,As,Be,Cu,Pb,Ni,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
14:39	ZZZZZZ	4665	37493	3482	2360
14:43	ZZZZZZ	4672	37563	3411	2347
14:48	ZZZZZZ	4389	35357	3379	2167
14:52	ZZZZZZ	4596	37146	3428	2326
14:57	ZZZZZZ	4599	36899	3404	2326
15:01	ZZZZZZ	4357	34930	3332	2140
15:06	MA13172-CCV7	4692	37398	3410	2241
15:10	MA13172-CCB7	4976	39975	3552	2652
15:15	ZZZZZZ	4687	37587	3402	2379
15:19	MP30376-MB1	4884	39871	3536	2638
15:24	MP30376-B1	4762	38291	3446	2357
15:28	MP30376-B2	4788	38277	3445	2363
15:32	ZZZZZZ	4879	39188	3457	2574
15:37	ZZZZZZ	4879	39092	3439	2597
15:41	MP30377-MB1	4975	40413	3524	2671
15:46	MP30377-B1	4839	38666	3473	2385
15:59	MA13172-CCV8	4671	36979	3357	2212
16:03	MA13172-CCB8	5006	40215	3543	2645
16:30	ZZZZZZ	5267	42176	3695	2536
16:34	ZZZZZZ	5288	41960	3723	2480
16:39	ZZZZZZ	6043 !	47008	4390	2009
16:43	ZZZZZZ	5325	42006	3697	2534
16:48	ZZZZZZ	6088 !	48090	4227	2519
16:52	MA13172-CCV9	4693	37091	3395	2229
16:56	MA13172-CCB9	4952	39225	3454	2618
17:27	ZZZZZZ	5752	45481	4013	2450
17:36	MA13172-CRIA2	4958	39366	3542	2565
17:41	MA13172-ICSA2	4439	34472	3293	2009
17:45	MA13172-CCV10	4738	37793	3402	2252
17:49	MA13172-CCB10	4973	39571	3468	2642
17:54	MA13172-ICSAB2	4385	34378	3284	1980
17:59	MA13172-CCV11	4758	38004	3468	2264
18:03	MA13172-CCB11	5021	40264	3560	2670

R = Reference for ISTD limits. ! = Outside limits.

INTERNAL STANDARD SUMMARY

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SA052016M1.ICP Date Analyzed: 05/20/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13172
Parameters: Sb,As,Be,Cu,Pb,Ni,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium (2243)	60-125 %
Istd#2	Yttrium (3600)	60-125 %
Istd#3	Yttrium (3710)	60-125 %
Istd#4	Indium	60-125 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SA052016M1.ICP Date Analyzed: 05/20/16 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA13172 Units: ug/l

Time:			09:24		10:00		10:53		11:45	
Sample ID:			ICB1		CCB1		CCB2		CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	anr							
Antimony	6.0	1	-0.70	<20	0.20	<20	-0.30	<6.0	0.60	<6.0
Arsenic	10	1.3	-0.70	<10	-0.20	<10	-0.30	<10	0.10	<10
Barium	200	1	anr							
Beryllium	4.0	.2	0.10	<5.0	-0.20	<5.0	-0.10	<4.0	0.0	<4.0
Cadmium	4.0	.2	anr							
Calcium	1000	50	anr							
Chromium	10	1	anr							
Cobalt	50	.2	anr							
Copper	25	1	0.0	<25	0.20	<25	0.30	<25	0.50	<25
Iron	300	17	anr							
Lead	5.0	1	-0.30	<20	-0.60	<20	0.0	<5.0	0.0	<5.0
Magnesium	5000	35	anr							
Manganese	15	.5	anr							
Molybdenum	50	.3	anr							
Nickel	40	.4	0.0	<40	0.10	<40	0.20	<40	0.20	<40
Potassium	10000	200	anr							
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500	anr							
Strontium	10	.5	anr							
Thallium	10	1.1	anr							
Tin	50	.9	anr							
Titanium	10	.5	anr							
Vanadium	50	.5	anr							
Zinc	20	3	-0.10	<20	0.20	<20	0.30	<20	0.40	<20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SA052016M1.ICP Date Analyzed: 05/20/16 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA13172 Units: ug/l

Time:			12:39		13:32		14:16		15:10	
Sample ID:			CCB4		CCB5		CCB6		CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	anr							
Antimony	6.0	1	0.80	<6.0	-0.20	<6.0	2.1	<6.0	2.4	<6.0
Arsenic	10	1.3	-0.30	<10	-0.80	<10	-0.10	<10	0.80	<10
Barium	200	1	anr							
Beryllium	4.0	.2	0.20	<4.0	0.0	<4.0	0.0	<4.0	0.0	<4.0
Cadmium	4.0	.2	anr							
Calcium	1000	50	anr							
Chromium	10	1	anr							
Cobalt	50	.2	anr							
Copper	25	1	0.60	<25	0.50	<25	-0.20	<25	-0.20	<25
Iron	300	17	anr							
Lead	5.0	1	0.10	<5.0	0.10	<5.0	0.80	<5.0	0.80	<5.0
Magnesium	5000	35	anr							
Manganese	15	.5	anr							
Molybdenum	50	.3								
Nickel	40	.4	0.20	<40	0.10	<40	0.10	<40	0.10	<40
Potassium	10000	200	anr							
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500	anr							
Strontium	10	.5								
Thallium	10	1.1	anr							
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5	anr							
Zinc	20	3	0.50	<20	0.40	<20	0.30	<20	0.20	<20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SA052016M1.ICP Date Analyzed: 05/20/16 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA13172 Units: ug/l

Time:			16:03		16:56		17:49		18:03	
Sample ID:			CCB8		CCB9		CCB10		CCB11	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	anr							
Antimony	6.0	1	2.8	<6.0	3.0	<6.0	2.9	<6.0	1.9	<6.0
Arsenic	10	1.3	0.80	<10	0.50	<10	0.40	<10	0.40	<10
Barium	200	1	anr							
Beryllium	4.0	.2	0.70	<4.0	0.30	<4.0	0.20	<4.0	0.20	<4.0
Cadmium	4.0	.2	anr							
Calcium	1000	50	anr							
Chromium	10	1	anr							
Cobalt	50	.2	anr							
Copper	25	1	0.0	<25	0.0	<25	-0.10	<25	-0.20	<25
Iron	300	17	anr							
Lead	5.0	1	0.30	<5.0	0.50	<5.0	0.40	<5.0	0.70	<5.0
Magnesium	5000	35	anr							
Manganese	15	.5	anr							
Molybdenum	50	.3								
Nickel	40	.4	0.20	<40	0.20	<40	0.10	<40	0.10	<40
Potassium	10000	200	anr							
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500	anr							
Strontium	10	.5								
Thallium	10	1.1	anr							
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5	anr							
Zinc	20	3	1.0	<20	0.90	<20	0.80	<20	0.80	<20

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SA052016M1.ICP Date Analyzed: 05/20/16 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA13172 Units: ug/l

Time:		09:17			09:54			10:48	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	2000	2060	103.0	2000	2030	101.5	2000	2090	104.5
Arsenic	2000	2040	102.0	2000	2040	102.0	2000	2110	105.5
Barium	anr								
Beryllium	2000	2120	106.0	2000	2010	100.5	2000	2040	102.0
Cadmium	anr								
Calcium	anr								
Chromium	anr								
Cobalt	anr								
Copper	2000	2040	102.0	2000	1980	99.0	2000	2000	100.0
Iron	anr								
Lead	2000	2040	102.0	2000	2010	100.5	2000	2070	103.5
Magnesium	anr								
Manganese	anr								
Molybdenum	anr								
Nickel	2000	2090	104.5	2000	2060	103.0	2000	2140	107.0
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium	anr								
Thallium	anr								
Tin	anr								
Titanium	anr								
Vanadium	anr								
Zinc	2000	2090	104.5	2000	2030	101.5	2000	2080	104.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SA052016M1.ICP Date Analyzed: 05/20/16 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA13172 Units: ug/l

Time:		11:41			12:35			13:28	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	2000	2010	100.5	2000	2040	102.0	2000	2080	104.0
Arsenic	2000	2020	101.0	2000	2060	103.0	2000	2100	105.0
Barium	anr								
Beryllium	2000	2000	100.0	2000	2010	100.5	2000	2040	102.0
Cadmium	anr								
Calcium	anr								
Chromium	anr								
Cobalt	anr								
Copper	2000	1990	99.5	2000	1980	99.0	2000	2020	101.0
Iron	anr								
Lead	2000	2020	101.0	2000	2020	101.0	2000	2070	103.5
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	2000	2050	102.5	2000	2080	104.0	2000	2130	106.5
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	2000	2040	102.0	2000	2050	102.5	2000	2080	104.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SA052016M1.ICP Date Analyzed: 05/20/16 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA13172 Units: ug/l

Time:		14:04			15:06			15:59	
Sample ID:	CCV	CCV6		CCV	CCV7		CCV	CCV8	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	2000	1980	99.0	2000	1970	98.5	2000	1980	99.0
Arsenic	2000	1980	99.0	2000	1960	98.0	2000	1970	98.5
Barium	anr								
Beryllium	2000	2010	100.5	2000	2040	102.0	2000	2070	103.5
Cadmium	anr								
Calcium	anr								
Chromium	anr								
Cobalt	anr								
Copper	2000	2010	100.5	2000	2050	102.5	2000	2100	105.0
Iron	anr								
Lead	2000	1970	98.5	2000	1960	98.0	2000	2000	100.0
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	2000	2010	100.5	2000	1980	99.0	2000	1980	99.0
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	2000	2020	101.0	2000	2030	101.5	2000	2080	104.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SA052016M1.ICP Date Analyzed: 05/20/16 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA13172 Units: ug/l

Time:		16:52			17:45			17:59	
Sample ID:	CCV	CCV9		CCV	CCV10		CCV	CCV11	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	2000	1970	98.5	2000	1940	97.0	2000	1940	97.0
Arsenic	2000	1970	98.5	2000	1930	96.5	2000	1940	97.0
Barium	anr								
Beryllium	2000	2050	102.5	2000	2020	101.0	2000	1990	99.5
Cadmium	anr								
Calcium	anr								
Chromium	anr								
Cobalt	anr								
Copper	2000	2080	104.0	2000	2020	101.0	2000	2000	100.0
Iron	anr								
Lead	2000	1980	99.0	2000	1950	97.5	2000	1940	97.0
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	2000	1980	99.0	2000	1950	97.5	2000	1950	97.5
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	2000	2050	102.5	2000	2030	101.5	2000	2010	100.5

(*) Outside of QC limits
(anr) Analyte not requested

HIGH STANDARD CHECK SUMMARY

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SA052016M1.ICP Date Analyzed: 05/20/16 Methods: SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA13172 Units: ug/l

Time:		09:10	
Sample ID:	HSTD	HSTD1	
Metal	True	Results	% Rec
Aluminum	anr		
Antimony	4000	4040	101.0
Arsenic	4000	4050	101.3
Barium	anr		
Beryllium	4000	4020	100.5
Cadmium	anr		
Calcium	anr		
Chromium	anr		
Cobalt	anr		
Copper	4000	3990	99.8
Iron	anr		
Lead	4000	4050	101.3
Magnesium	anr		
Manganese	anr		
Molybdenum	anr		
Nickel	4000	4000	100.0
Potassium	anr		
Selenium	anr		
Silver	anr		
Sodium	anr		
Strontium	anr		
Thallium	anr		
Tin	anr		
Titanium	anr		
Vanadium	anr		
Zinc	4000	3990	99.8

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SA052016M1.ICP Date Analyzed: 05/20/16 Methods: SW846 6010C
QC Limits: CRI 70-130% CRIA 70-130% Run ID: MA13172 Units: ug/l

Time:			09:34		17:36	
Sample ID:	CRI	CRIA	CRIA1		CRIA2	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	400	200	anr			
Antimony	10	5.0	4.1	82.0	5.2	104.0
Arsenic	20	10	9.8	98.0	10.2	102.0
Barium	400	200	anr			
Beryllium	10	5.0	5.0	100.0	5.2	104.0
Cadmium	10	5.0	anr			
Calcium	2000	1000	anr			
Chromium	20	10	anr			
Cobalt	100	50	anr			
Copper	50	25	27.3	109.2	27.1	108.4
Iron	600	300	anr			
Lead	10	5.0	4.6	92.0	5.1	102.0
Magnesium	10000	5000	anr			
Manganese	30	15	anr			
Molybdenum	100	50	anr			
Nickel	80	40	44.9	112.3	42.1	105.3
Potassium	20000	10000	anr			
Selenium	20	10	anr			
Silver	20	10	anr			
Sodium	20000	10000	anr			
Strontium	20	10	anr			
Thallium	20	10	anr			
Tin	100	50	anr			
Titanium	20	10	anr			
Vanadium	100	50	anr			
Zinc	40	20	22.4	112.0	22.0	110.0

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SA052016M1.ICP Date Analyzed: 05/20/16 Methods: SW846 6010C
QC Limits: 80 to 120 % Recovery Run ID: MA13172 Units: ug/l

Time:			09:42		09:47		17:41		17:54	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1		ICSA2		ICSAB2	
Metal	True	True	Results	% Rec	Results	% Rec	Results	% Rec	Results	% Rec
Aluminum	500000	500000	524000	104.8	498000	99.6	509000	101.8	500000	100.0
Antimony		1000	-1.5		1040	104.0	1.0		984	98.4
Arsenic		1000	-1.2		1130	113.0	2.2		1050	105.0
Barium		500	-0.50		528	105.6	-0.10		538	107.6
Beryllium		500	-0.30		530	106.0	0.0		511	102.2
Cadmium		1000	0.40		1020	102.0	0.0		935	93.5
Calcium	500000	500000	503000	100.6	493000	98.6	494000	98.8	491000	98.2
Chromium		500	-1.0		542	108.4	-0.50		508	101.6
Cobalt		500	-0.30		498	99.6	-0.10		471	94.2
Copper		500	0.0		542	108.4	0.0		550	110.0
Iron	200000	200000	189000	94.5	188000	94.0	181000	90.5	183000	91.5
Lead		1000	-0.60		1020	102.0	-8.4		938	93.8
Magnesium	500000	500000	551000	110.2	537000	107.4	536000	107.2	534000	106.8
Manganese		500	-0.10		541	108.2	-0.30		496	99.2
Molybdenum		1000	0.20		951	95.1	1.1		905	90.5
Nickel		1000	0.30		1010	101.0	0.40		926	92.6
Potassium			48.1		1.4		54.9		21.5	
Selenium		1000	1.9		1050	105.0	3.5		991	99.1
Silver		1000	0.40		1050	105.0	-0.10		1040	104.0
Sodium			155		166		149		144	
Strontium		1000	-0.40		1020	102.0	0.30		1040	104.0
Thallium		1000	0.50		973	97.3	-1.0		913	91.3
Tin		1000	1.6		944	94.4	2.1		901	90.1
Titanium		1000	-0.50		1030	103.0	0.90		956	95.6
Vanadium		500	0.10		493	98.6	0.10		454	90.8
Zinc		1000	-1.1		1020	102.0	-1.9		956	95.6

(*) Outside of QC limits
(anr) Analyte not requested

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB052316M1.ICP Date Analyzed: 05/23/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13175
Parameters: Sb,As,Be,Cu,Ni,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
08:52	MA13175-STD1	1		STDA
08:55	MA13175-STD2	1		STDB
08:59	MA13175-STD3	1		STDC
09:02	MA13175-STD4	1		STDD
09:07	MA13175-HSTD1	1		
09:13	MA13175-ICV1	1		
09:20	MA13175-ICB1	1		
09:24	MA13175-CRIA1	1		
09:30	MA13175-ICSA1	1		
09:37	MA13175-ICSAB1	1		
09:44	MA13175-CCV1	1		
09:51	MA13175-CCB1	1		
09:54	FA33973-3	50		
---------->	Last reportable sample/prep for job FA33973			
09:59	ZZZZZZ	4		
10:03	ZZZZZZ	100		
10:07	ZZZZZZ	100		
10:11	ZZZZZZ	50		
10:15	ZZZZZZ	2		
10:19	FA34066-1	10		(sample used for QC only; not part of login FA33973)
10:23	MP30377-D1	10		
10:27	MP30377-S1	10		
10:31	MP30377-S2	10		
10:35	MA13175-CCV2	1		
10:39	MA13175-CCB2	1		
10:43	MP30377-PS1	10		
10:47	MP30377-SD1	50		
10:51	ZZZZZZ	10		
10:55	ZZZZZZ	2		
11:00	ZZZZZZ	10		
11:04	ZZZZZZ	10		
11:08	ZZZZZZ	10		
11:12	ZZZZZZ	5		
11:16	ZZZZZZ	5		

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB052316M1.ICP Date Analyzed: 05/23/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13175
Parameters: Sb,As,Be,Cu,Ni,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
11:20	ZZZZZZ	5		
11:24	MA13175-CCV3	1		
11:28	MA13175-CCB3	1		
11:32	ZZZZZZ	5		
11:40	MP30382-MB1	1		
11:44	MP30382-B1	1		
11:48	FA34160-1	1		(sample used for QC only; not part of login FA33973)
11:52	MP30382-D1	1		
11:56	MP30382-SD1	5		
12:01	MP30382-PS1	1		
12:05	MP30382-S1	1		
12:09	MP30382-S2	1		
12:12	MA13175-CCV4	1		
12:16	MA13175-CCB4	1		
12:21	ZZZZZZ	1		
12:25	ZZZZZZ	1		
12:29	ZZZZZZ	1		
12:33	ZZZZZZ	1		
12:37	ZZZZZZ	1		
12:41	ZZZZZZ	1		
12:45	ZZZZZZ	1		
13:03	MA13175-CCV5	1		
13:07	MA13175-CCB5	1		
13:35	MA13175-ICV2	1		
13:40	MA13175-CCV6	1		
13:46	MA13175-CCB6	1		
13:50	ZZZZZZ	10		
13:54	ZZZZZZ	1		
13:58	ZZZZZZ	1		
14:03	ZZZZZZ	1		
14:07	ZZZZZZ	1		
14:11	ZZZZZZ	1		
14:15	ZZZZZZ	1		

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB052316M1.ICP Date Analyzed: 05/23/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13175
Parameters: Sb,As,Be,Cu,Ni,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
14:20	ZZZZZZ	1		
14:24	ZZZZZZ	1		
14:28	MP30383-MB1	1		
14:32	MA13175-CCV7	1		
14:36	MA13175-CCB7	1		
14:40	MP30383-B1	1		
14:44	FA33900-19	1		(sample used for QC only; not part of login FA33973)
14:49	MP30383-D1	1		
14:53	MP30383-SD1	5		
14:57	MP30383-S1	1		
15:01	MP30383-S2	1		
15:05	ZZZZZZ	1		
15:10	ZZZZZZ	1		
15:14	ZZZZZZ	1		
15:18	FA34023-1L	1		(sample used for QC only; not part of login FA33973)
15:23	MA13175-CCV8	1		
15:27	MA13175-CCB8	1		
15:31	ZZZZZZ	1		
15:35	ZZZZZZ	1		
15:39	MP30383-D2	1		
15:43	MP30383-MB2	1		
15:48	MP30383-B2	1		
15:52	MP30383-MB3	1		
15:56	MP30383-B3	1		
16:00	MP30384-MB1	1		
16:04	MP30384-B1	1		
16:08	FA33931-1L	1		(sample used for QC only; not part of login FA33973)
16:12	MA13175-CCV9	1		
16:16	MA13175-CCB9	1		
16:20	MP30384-D1	1		
16:24	MP30384-SD1	5		
16:28	MP30384-S1	1		
16:32	MP30384-S2	1		

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB052316M1.ICP Date Analyzed: 05/23/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13175
Parameters: Sb,As,Be,Cu,Ni,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
16:36	ZZZZZZ	1		
16:41	ZZZZZZ	1		
16:45	ZZZZZZ	1		
16:49	ZZZZZZ	1		
16:53	ZZZZZZ	1		
16:57	ZZZZZZ	1		
17:01	MA13175-CCV10	1		
17:05	MA13175-CCB10	1		
17:09	ZZZZZZ	1		
17:13	ZZZZZZ	1		
17:17	ZZZZZZ	1		
17:22	MP30384-MB2	1		
17:26	MP30384-B2	1		
17:30	MP30385-MB1	1		
17:34	MP30385-B1	1		
17:38	FA34154-3	1		(sample used for QC only; not part of login FA33973)
17:42	MP30385-D1	1		
17:46	MP30385-SD1	5		
17:50	MA13175-CCV11	1		
17:54	MA13175-CCB11	1		
17:58	MP30385-PS1	1		
18:02	MP30385-S1	1		
18:06	MP30385-S2	1		
18:18	ZZZZZZ	1		
18:23	ZZZZZZ	1		
18:27	ZZZZZZ	1		
18:31	ZZZZZZ	1		
18:39	MA13175-CCV12	1		
18:43	MA13175-CCB12	1		
18:51	ZZZZZZ	1		
18:56	ZZZZZZ	1		
19:00	ZZZZZZ	1		
19:04	ZZZZZZ	10		

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB052316M1.ICP Date Analyzed: 05/23/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13175
Parameters: Sb,As,Be,Cu,Ni,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
19:08	ZZZZZZ	10		
19:12	ZZZZZZ	10		
19:17	ZZZZZZ	10		
19:21	MP30386-MB1	1		
19:25	MP30386-B1	1		
19:29	MA13175-CCV13	1		
19:33	MA13175-CCB13	1		
19:37	MP30386-B2	1		
19:41	ZZZZZZ	1		
19:45	MA13175-CRIA2	1		
19:49	MA13175-ICSA2	1		
19:54	MA13175-ICSAB2	1		
19:58	MA13175-CCV14	1		
20:02	MA13175-CCB14	1		
---------->	Last reportable CCB for job FA33973			
	Refer to raw data for calibration curve and standards.			

INTERNAL STANDARD SUMMARY

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB052316M1.ICP Date Analyzed: 05/23/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13175
Parameters: Sb,As,Be,Cu,Ni,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
08:52	MA13175-STD1	6120	50837	4524	2702
08:55	MA13175-STD2	6097	50286	4595	2541
08:59	MA13175-STD3	5827	48552	4563	2294
09:02	MA13175-STD4	5602	47155	4440	2129
09:07	MA13175-HSTD1	5606	47120	4487	2125
09:13	MA13175-ICV1	5798	48750	4528	2295
09:20	MA13175-ICB1	6039 R	51170 R	4546 R	2696 R
09:24	MA13175-CRIA1	5968	50003	4573	2583
09:30	MA13175-ICSA1	5399	43394	4397	2064
09:37	MA13175-ICSAB1	5286	43841	4410	2024
09:44	MA13175-CCV1	5717	48703	4510	2288
09:51	MA13175-CCB1	6024	51062	4573	2686
09:54	FA33973-3	6758	56861	5032	2649
09:59	ZZZZZZ	6189	50416	4842	2206
10:03	ZZZZZZ	6024	51072	4536	2660
10:07	ZZZZZZ	6039	50809	4514	2663
10:11	ZZZZZZ	6092	50862	4458	2665
10:15	ZZZZZZ	6043	49320	4619	2479
10:19	FA34066-1	6912	56924	5038	2583
10:23	MP30377-D1	7056	58294	5224	2565
10:27	MP30377-S1	7030	58526	5224	2531
10:31	MP30377-S2	6935	57749	5197	2507
10:35	MA13175-CCV2	5774	47844	4387	2271
10:39	MA13175-CCB2	6082	50258	4358	2679
10:43	MP30377-PS1	6934	56583	5030	2568
10:47	MP30377-SD1	6290	51518	4512	2655
10:51	ZZZZZZ	7084	57974	5191	2593
10:55	ZZZZZZ	6946	54837	5240	2205
11:00	ZZZZZZ	7161	58189	5160	2588
11:04	ZZZZZZ	7449	60171	5460	2462
11:08	ZZZZZZ	7170	58457	5233	2576
11:12	ZZZZZZ	7121	57301	5073	2575
11:16	ZZZZZZ	7229	58646	5312	2516

INTERNAL STANDARD SUMMARY

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB052316M1.ICP Date Analyzed: 05/23/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13175
Parameters: Sb,As,Be,Cu,Ni,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
11:20	ZZZZZZ	7112	58147	5202	2561
11:24	MA13175-CCV3	5877	47936	4382	2291
11:28	MA13175-CCB3	5998	49814	4347	2654
11:32	ZZZZZZ	6983	57577	5150	2536
11:40	MP30382-MB1	6130	51190	4124	2711
11:44	MP30382-B1	5878	49325	4464	2423
11:48	FA34160-1	6018	50752	4563	2596
11:52	MP30382-D1	6075	50152	4477	2592
11:56	MP30382-SD1	6102	50083	4417	2649
12:01	MP30382-PS1	5986	49486	4478	2497
12:05	MP30382-S1	5905	49336	4517	2386
12:09	MP30382-S2	5906	48766	4454	2381
12:12	MA13175-CCV4	5785	48029	4394	2273
12:16	MA13175-CCB4	6036	50325	4418	2668
12:21	ZZZZZZ	5940	50740	4584	2575
12:25	ZZZZZZ	5935	50597	4529	2596
12:29	ZZZZZZ	5941	50413	4486	2582
12:33	ZZZZZZ	6005	50034	4473	2566
12:37	ZZZZZZ	6047	49736	4460	2590
12:41	ZZZZZZ	6072	49485	4422	2541
12:45	ZZZZZZ	5914	48132	4404	2428
13:03	MA13175-CCV5	5849	47125	4250	2269
13:07	MA13175-CCB5	6090	49714	4342	2658
13:35	MA13175-ICV2	5751	47084	4344	2254
13:40	MA13175-CCV6	5787	47482	4314	2271
13:46	MA13175-CCB6	6013	49580	4375	2655
13:50	ZZZZZZ	6123	49913	4480	2477
13:54	ZZZZZZ	6007	48971	4484	2503
13:58	ZZZZZZ	6177	50811	4440	2707
14:03	ZZZZZZ	5748	46579	4319	2334
14:07	ZZZZZZ	5701	45595	4261	2298
14:11	ZZZZZZ	6219	50611	4349	2699
14:15	ZZZZZZ	5405	42995	4208	2090

INTERNAL STANDARD SUMMARY

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB052316M1.ICP Date Analyzed: 05/23/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13175
Parameters: Sb,As,Be,Cu,Ni,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
14:20	ZZZZZZ	5386	42643	4201	2083
14:24	ZZZZZZ	5690	45225	4278	2245
14:28	MP30383-MB1	6178	50323	4351	2691
14:32	MA13175-CCV7	5883	47231	4267	2281
14:36	MA13175-CCB7	6114	49282	4294	2655
14:40	MP30383-B1	6034	47961	4339	2418
14:44	FA33900-19	5909	46514	4346	2397
14:49	MP30383-D1	5915	46327	4294	2392
14:53	MP30383-SD1	6020	48150	4322	2516
14:57	MP30383-S1	5916	46387	4336	2290
15:01	MP30383-S2	5911	46081	4269	2289
15:05	ZZZZZZ	5997	46770	4409	2406
15:10	ZZZZZZ	5912	46895	4351	2373
15:14	ZZZZZZ	5973	46815	4377	2375
15:18	FA34023-1L	5881	46369	4343	2340
15:23	MA13175-CCV8	5830	47098	4302	2263
15:27	MA13175-CCB8	6102	49640	4333	2668
15:31	ZZZZZZ	6378	51917	4540	2762
15:35	ZZZZZZ	6153	49133	4392	2618
15:39	MP30383-D2	5786	46072	4363	2322
15:43	MP30383-MB2	5857	46573	4407	2390
15:48	MP30383-B2	5878	46397	4332	2290
15:52	MP30383-MB3	6201	50424	4359	2702
15:56	MP30383-B3	6008	48652	4349	2424
16:00	MP30384-MB1	6191	50822	4391	2701
16:04	MP30384-B1	6021	47970	4315	2411
16:08	FA33931-1L	6141	49273	4382	2549
16:12	MA13175-CCV9	5816	46815	4276	2256
16:16	MA13175-CCB9	6078	49001	4299	2646
16:20	MP30384-D1	6119	49493	4351	2545
16:24	MP30384-SD1	6131	50056	4410	2637
16:28	MP30384-S1	6016	48133	4400	2380
16:32	MP30384-S2	6044	47862	4340	2377

INTERNAL STANDARD SUMMARY

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB052316M1.ICP Date Analyzed: 05/23/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13175
Parameters: Sb,As,Be,Cu,Ni,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
16:36	ZZZZZZ	6091	49088	4362	2499
16:41	ZZZZZZ	6110	48656	4371	2494
16:45	ZZZZZZ	6084	49308	4415	2541
16:49	ZZZZZZ	6080	49318	4401	2539
16:53	ZZZZZZ	6100	49343	4340	2567
16:57	ZZZZZZ	6064	49284	4439	2513
17:01	MA13175-CCV10	5808	47521	4357	2265
17:05	MA13175-CCB10	6024	49042	4298	2633
17:09	ZZZZZZ	6051	48756	4420	2489
17:13	ZZZZZZ	6073	49446	4486	2479
17:17	ZZZZZZ	6036	49443	4382	2582
17:22	MP30384-MB2	6160	50907	4414	2689
17:26	MP30384-B2	5989	49097	4434	2428
17:30	MP30385-MB1	6187	51777	4541	2744
17:34	MP30385-B1	6049	49454	4470	2450
17:38	FA34154-3	6544	52175	4824	2415
17:42	MP30385-D1	6615	53544	4984	2403
17:46	MP30385-SD1	6264	51088	4581	2554
17:50	MA13175-CCV11	5750	47226	4310	2248
17:54	MA13175-CCB11	6141	51462	4482	2698
17:58	MP30385-PS1	6551	52272	4936	2387
18:02	MP30385-S1	6556	51957	4947	2327
18:06	MP30385-S2	6690	52248	4961	2299
18:18	ZZZZZZ	6511	51575	4811	2323
18:23	ZZZZZZ	6663	51724	4843	2473
18:27	ZZZZZZ	6437	50470	4670	2436
18:31	ZZZZZZ	6570	52400	4767	2498
18:39	MA13175-CCV12	5785	47359	4281	2264
18:43	MA13175-CCB12	6006	49309	4260	2633
18:51	ZZZZZZ	6376	51215	5131	1907
18:56	ZZZZZZ	6426	51252	5066	1946
19:00	ZZZZZZ	6212	51182	4436	2701
19:04	ZZZZZZ	6091	49795	4458	2620

INTERNAL STANDARD SUMMARY

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB052316M1.ICP Date Analyzed: 05/23/16 Methods: SW846 6010C
Analyst: LM Run ID: MA13175
Parameters: Sb,As,Be,Cu,Ni,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
19:08	ZZZZZZ	6110	50358	4455	2619
19:12	ZZZZZZ	6080	49607	4358	2586
19:17	ZZZZZZ	5980	50000	4417	2561
19:21	MP30386-MB1	6197	51271	4469	2729
19:25	MP30386-B1	6050	49206	4369	2452
19:29	MA13175-CCV13	5751	46639	4212	2241
19:33	MA13175-CCB13	6019	49601	4233	2645
19:37	MP30386-B2	6022	49179	4391	2436
19:41	ZZZZZZ	6211	51453	4456	2772
19:45	MA13175-CRIA2	6022	48996	4326	2557
19:49	MA13175-ICSA2	5350	42080	4106	2024
19:54	MA13175-ICSAB2	5332	42101	4118	1993
19:58	MA13175-CCV14	5747	47158	4238	2253
20:02	MA13175-CCB14	5981	49397	4278	2623

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium (2243)	60-125 %
Istd#2	Yttrium (3600)	60-125 %
Istd#3	Yttrium (3710)	60-125 %
Istd#4	Indium	60-125 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB052316M1.ICP Date Analyzed: 05/23/16 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA13175 Units: ug/l

Time: / Sample ID:			09:20 ICB1		09:51 CCB1		10:39 CCB2		11:28 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	anr							
Antimony	6.0	1	1.2	<6.0	1.3	<6.0	1.4	<6.0	1.4	<6.0
Arsenic	10	1.3	-0.50	<10	-0.60	<10	-0.30	<10	-0.20	<10
Barium	200	1	anr							
Beryllium	4.0	.2	0.40	<4.0	0.0	<4.0	0.50	<4.0	0.40	<4.0
Cadmium	5.0	.2	anr							
Calcium	1000	50								
Chromium	10	1	anr							
Cobalt	50	.2								
Copper	25	1	0.30	<25	0.20	<25	0.30	<25	0.20	<25
Iron	300	17	anr							
Lead	5.0	1	anr							
Magnesium	5000	35								
Manganese	15	.5	anr							
Molybdenum	50	.3								
Nickel	40	.4	0.0	<40	0.20	<40	0.20	<40	0.10	<40
Potassium	10000	200								
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500	anr							
Strontium	10	.5								
Thallium	10	1.1	anr							
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5	anr							
Zinc	20	3	0.0	<20	0.20	<20	0.20	<20	0.20	<20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB052316M1.ICP Date Analyzed: 05/23/16 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA13175 Units: ug/l

Time: / Sample ID:			12:16 CCB4		13:07 CCB5		13:46 CCB6		14:36 CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	anr							
Antimony	6.0	1	2.1	<6.0	1.5	<6.0	1.5	<6.0	1.8	<6.0
Arsenic	10	1.3	0.10	<10	0.30	<10	0.50	<10	0.70	<10
Barium	200	1	anr							
Beryllium	4.0	.2	0.50	<4.0	0.20	<4.0	0.20	<4.0	0.20	<4.0
Cadmium	5.0	.2	anr							
Calcium	1000	50								
Chromium	10	1	anr							
Cobalt	50	.2								
Copper	25	1	0.30	<25	0.0	<25	0.50	<25	0.40	<25
Iron	300	17	anr							
Lead	5.0	1	anr							
Magnesium	5000	35								
Manganese	15	.5	anr							
Molybdenum	50	.3								
Nickel	40	.4	0.10	<40	0.0	<40	0.20	<40	0.20	<40
Potassium	10000	200								
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500	anr							
Strontium	10	.5								
Thallium	10	1.1	anr							
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5	anr							
Zinc	20	3	0.10	<20	0.0	<20	0.20	<20	0.20	<20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB052316M1.ICP Date Analyzed: 05/23/16 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA13175 Units: ug/l

Time: / Sample ID:			15:27 CCB8		16:16 CCB9		17:05 CCB10		17:54 CCB11	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	anr							
Antimony	6.0	1	0.70	<6.0	1.6	<6.0	1.3	<6.0	0.40	<6.0
Arsenic	10	1.3	0.70	<10	0.80	<10	0.50	<10	0.50	<10
Barium	200	1	anr							
Beryllium	4.0	.2	0.40	<4.0	0.60	<4.0	0.40	<4.0	0.30	<4.0
Cadmium	5.0	.2	anr							
Calcium	1000	50								
Chromium	10	1	anr							
Cobalt	50	.2								
Copper	25	1	0.80	<25	0.70	<25	0.70	<25	0.60	<25
Iron	300	17	anr							
Lead	5.0	1	anr							
Magnesium	5000	35								
Manganese	15	.5	anr							
Molybdenum	50	.3								
Nickel	40	.4	0.30	<40	0.40	<40	0.40	<40	0.30	<40
Potassium	10000	200								
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500	anr							
Strontium	10	.5								
Thallium	10	1.1	anr							
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5	anr							
Zinc	20	3	0.70	<20	0.70	<20	0.60	<20	0.50	<20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB052316M1.ICP Date Analyzed: 05/23/16 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA13175 Units: ug/l

Time:			18:43		19:33		20:02	
Sample ID:			CCB12		CCB13		CCB14	
Metal	RL	IDL	raw	final	raw	final	raw	final
Aluminum	200	14	anr					
Antimony	6.0	1	0.50	<6.0	1.6	<6.0	0.60	<6.0
Arsenic	10	1.3	0.30	<10	0.20	<10	-0.20	<10
Barium	200	1	anr					
Beryllium	4.0	.2	0.20	<4.0	0.0	<4.0	0.40	<4.0
Cadmium	5.0	.2	anr					
Calcium	1000	50						
Chromium	10	1	anr					
Cobalt	50	.2						
Copper	25	1	0.50	<25	0.50	<25	0.90	<25
Iron	300	17	anr					
Lead	5.0	1	anr					
Magnesium	5000	35						
Manganese	15	.5	anr					
Molybdenum	50	.3						
Nickel	40	.4	0.10	<40	0.10	<40	0.20	<40
Potassium	10000	200						
Selenium	10	2.4	anr					
Silver	10	.7	anr					
Sodium	10000	500	anr					
Strontium	10	.5						
Thallium	10	1.1	anr					
Tin	50	.9						
Titanium	10	.5						
Vanadium	50	.5	anr					
Zinc	20	3	0.50	<20	0.10	<20	0.10	<20

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB052316M1.ICP Date Analyzed: 05/23/16 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA13175 Units: ug/l

Time:		09:13			09:44			10:35	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	2000	2030	101.5	2000	2030	101.5	2000	2030	101.5
Arsenic	2000	2000	100.0	2000	2030	101.5	2000	2030	101.5
Barium	anr								
Beryllium	2000	2060	103.0	2000	2000	100.0	2000	2060	103.0
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper	2000	2000	100.0	2000	1990	99.5	2000	2040	102.0
Iron	anr								
Lead	anr								
Magnesium									
Manganese	anr								
Molybdenum									
Nickel	2000	2060	103.0	2000	2050	102.5	2000	2050	102.5
Potassium									
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	2000	2050	102.5	2000	2030	101.5	2000	2050	102.5

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB052316M1.ICP Date Analyzed: 05/23/16 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA13175 Units: ug/l

Time:		11:24			12:12			13:03	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	2000	1990	99.5	2000	2050	102.5	2000	2020	101.0
Arsenic	2000	1990	99.5	2000	2040	102.0	2000	2000	100.0
Barium	anr								
Beryllium	2000	2060	103.0	2000	2060	103.0	2000	2110	105.5
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper	2000	2050	102.5	2000	2060	103.0	2000	2100	105.0
Iron	anr								
Lead	anr								
Magnesium									
Manganese	anr								
Molybdenum									
Nickel	2000	2010	100.5	2000	2060	103.0	2000	2030	101.5
Potassium									
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	2000	2040	102.0	2000	2070	103.5	2000	2060	103.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB052316M1.ICP Date Analyzed: 05/23/16 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA13175 Units: ug/l

Time:		13:35			13:40			14:32	
Sample ID:	ICV	ICV2		CCV	CCV6		CCV	CCV7	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	2000	2050	102.5	2000	1990	99.5	2000	1960	98.0
Arsenic	2000	2040	102.0	2000	2000	100.0	2000	1960	98.0
Barium	anr								
Beryllium	2000	2080	104.0	2000	1990	99.5	2000	2020	101.0
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper	2000	2030	101.5	2000	1970	98.5	2000	1990	99.5
Iron	anr								
Lead	anr								
Magnesium									
Manganese	anr								
Molybdenum									
Nickel	2000	2090	104.5	2000	2010	100.5	2000	1980	99.0
Potassium									
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	2000	2080	104.0	2000	2000	100.0	2000	2000	100.0

(*) Outside of QC limits
(anr) Analyte not requested

SGS ACCUTEST FA33973

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB052316M1.ICP Date Analyzed: 05/23/16 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA13175 Units: ug/l

Time:		15:23			16:12			17:01	
Sample ID:	CCV	CCV8		CCV	CCV9		CCV	CCV10	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	2000	2000	100.0	2000	1990	99.5	2000	1990	99.5
Arsenic	2000	1990	99.5	2000	1970	98.5	2000	1990	99.5
Barium	anr								
Beryllium	2000	2030	101.5	2000	2030	101.5	2000	2000	100.0
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper	2000	2020	101.0	2000	2020	101.0	2000	2010	100.5
Iron	anr								
Lead	anr								
Magnesium									
Manganese	anr								
Molybdenum									
Nickel	2000	2010	100.5	2000	2000	100.0	2000	2010	100.5
Potassium									
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	2000	2030	101.5	2000	2020	101.0	2000	2020	101.0

(*) Outside of QC limits
(anr) Analyte not requested

SGS ACCUTEST FA33973

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB052316M1.ICP Date Analyzed: 05/23/16 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA13175 Units: ug/l

Time:		17:50			18:39			19:29	
Sample ID:	CCV	CCV11		CCV	CCV12		CCV	CCV13	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	2000	2000	100.0	2000	1990	99.5	2000	2010	100.5
Arsenic	2000	2000	100.0	2000	1990	99.5	2000	2010	100.5
Barium	anr								
Beryllium	2000	1990	99.5	2000	1980	99.0	2000	2010	100.5
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper	2000	2000	100.0	2000	2000	100.0	2000	2030	101.5
Iron	anr								
Lead	anr								
Magnesium									
Manganese	anr								
Molybdenum									
Nickel	2000	2030	101.5	2000	2020	101.0	2000	2040	102.0
Potassium									
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	2000	2020	101.0	2000	2020	101.0	2000	2040	102.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB052316M1.ICP Date Analyzed: 05/23/16 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA13175 Units: ug/l

Time:		19:58	
Sample ID:	CCV	CCV14	
Metal	True	Results	% Rec
Aluminum	anr		
Antimony	2000	2020	101.0
Arsenic	2000	2020	101.0
Barium	anr		
Beryllium	2000	1990	99.5
Cadmium	anr		
Calcium			
Chromium	anr		
Cobalt			
Copper	2000	2000	100.0
Iron	anr		
Lead	anr		
Magnesium			
Manganese	anr		
Molybdenum			
Nickel	2000	2040	102.0
Potassium			
Selenium	anr		
Silver	anr		
Sodium	anr		
Strontium			
Thallium	anr		
Tin			
Titanium			
Vanadium	anr		
Zinc	2000	2040	102.0

(*) Outside of QC limits
(anr) Analyte not requested

HIGH STANDARD CHECK SUMMARY

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB052316M1.ICP Date Analyzed: 05/23/16 Methods: SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA13175 Units: ug/l

Time:		09:07	
Sample ID:	HSTD	HSTD1	
Metal	True	Results	% Rec
Aluminum	anr		
Antimony	4000	4020	100.5
Arsenic	4000	4020	100.5
Barium	anr		
Beryllium	4000	4010	100.3
Cadmium	anr		
Calcium			
Chromium	anr		
Cobalt			
Copper	4000	4030	100.8
Iron	anr		
Lead	anr		
Magnesium			
Manganese	anr		
Molybdenum			
Nickel	4000	3970	99.3
Potassium			
Selenium	anr		
Silver	anr		
Sodium	anr		
Strontium			
Thallium	anr		
Tin			
Titanium			
Vanadium	anr		
Zinc	4000	3980	99.5

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB052316M1.ICP Date Analyzed: 05/23/16 Methods: SW846 6010C
QC Limits: CRI 70-130% CRIA 70-130% Run ID: MA13175 Units: ug/l

Time:			09:24		19:45	
Sample ID:	CRI	CRIA	CRIA1		CRIA2	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	400	200	anr			
Antimony	10	5.0	5.6	112.0	4.8	96.0
Arsenic	20	10	9.8	98.0	10.8	108.0
Barium	400	200	anr			
Beryllium	10	5.0	5.3	106.0	5.1	102.0
Cadmium	10	5.0	anr			
Calcium	2000	1000				
Chromium	20	10	anr			
Cobalt	100	50				
Copper	50	25	27.7	110.8	28.2	112.8
Iron	600	300	anr			
Lead	10	5.0	anr			
Magnesium	10000	5000				
Manganese	30	15	anr			
Molybdenum	100	50				
Nickel	80	40	44.0	110.0	44.2	110.5
Potassium	20000	10000				
Selenium	20	10	anr			
Silver	20	10	anr			
Sodium	20000	10000	anr			
Strontium	20	10				
Thallium	20	10	anr			
Tin	100	50				
Titanium	20	10				
Vanadium	100	50	anr			
Zinc	40	20	21.8	109.0	22.1	110.5

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

File ID: SB052316M1.ICP Date Analyzed: 05/23/16 Methods: SW846 6010C
QC Limits: 80 to 120 % Recovery Run ID: MA13175 Units: ug/l

Time:			09:30		09:37		19:49		19:54	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1		ICSA2		ICSAB2	
Metal	True	True	Results	% Rec	Results	% Rec	Results	% Rec	Results	% Rec
Aluminum	500000	500000	506000	101.2	502000	100.4	515000	103.0	504000	100.8
Antimony		1000	0.0		1030	103.0	-0.20		1040	104.0
Arsenic		1000	-1.8		1100	110.0	-0.30		1120	112.0
Barium		500	0.90		528	105.6	0.50		543	108.6
Beryllium		500	0.10		501	100.2	0.0		513	102.6
Cadmium		1000	0.0		974	97.4	-0.10		1000	100.0
Calcium	500000	500000	475000	95.0	481000	96.2	483000	96.6	482000	96.4
Chromium		500	0.0		508	101.6	0.10		535	107.0
Cobalt		500	-0.30		487	97.4	-0.30		499	99.8
Copper		500	0.0		543	108.6	0.50		558	111.6
Iron	200000	200000	180000	90.0	179000	89.5	181000	90.5	183000	91.5
Lead		1000	0.10		962	96.2	-2.2		1000	100.0
Magnesium	500000	500000	507000	101.4	503000	100.6	511000	102.2	510000	102.0
Manganese		500	0.0		515	103.0	-0.30		530	106.0
Molybdenum		1000	0.50		934	93.4	-0.20		945	94.5
Nickel		1000	-0.70		992	99.2	-0.50		1000	100.0
Potassium			156		111		-43		-47	
Selenium		1000	0.40		1030	103.0	-1.5		1050	105.0
Silver		1000	-0.70		1000	100.0	-0.30		1020	102.0
Sodium			220		202		-94		-93	
Strontium		1000	0.10		978	97.8	0.10		1020	102.0
Thallium		1000	0.0		953	95.3	-0.20		989	98.9
Tin		1000	0.10		947	94.7	0.10		938	93.8
Titanium		1000	0.0		984	98.4	0.10		1020	102.0
Vanadium		500	0.50		477	95.4	0.50		484	96.8
Zinc		1000	-0.20		975	97.5	-0.80		1000	100.0

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

QC Batch ID: MP30364
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 05/17/16

Metal	RL	IDL	MDL	MB raw	final
Aluminum	10	.7	1.8		
Antimony	1.0	.05	.065	0.065	<1.0
Arsenic	0.50	.065	.1	-0.015	<0.50
Barium	10	.05	.05		
Beryllium	0.25	.01	.025	-0.040	<0.25
Cadmium	0.20	.01	.025		
Calcium	250	2.5	2.5		
Chromium	0.50	.05	.05		
Cobalt	2.5	.01	.025		
Copper	1.3	.05	.05	0.0	<1.3
Iron	15	.85	.85		
Lead	1.0	.05	.05	0.035	<1.0
Magnesium	250	1.8	1.8		
Manganese	0.75	.025	.025		
Molybdenum	2.5	.015	.025		
Nickel	2.0	.02	.025	-0.015	<2.0
Potassium	500	10	10		
Selenium	1.0	.12	.12		
Silver	0.50	.035	.041		
Sodium	500	25	25		
Strontium	0.50	.025	.025		
Thallium	0.50	.055	.055		
Tin	2.5	.045	.045		
Titanium	0.50	.025	.025		
Vanadium	2.5	.025	.025		
Zinc	1.0	.15	.15	0.20	<1.0

Associated samples MP30364: FA33973-1, FA33973-2

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

QC Batch ID: MP30364
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date:			05/17/16					05/17/16	
Metal	FA33973-1 Original	DUP	RPD	QC Limits	FA33973-1 Original	MS	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum									
Antimony	0.0	0.0 (a)	NC	0-20	0.0	4.5 (a)	20.9	21.5N(b)	80-120
Arsenic	4.9	4.6 (a)	6.3	0-20	4.9	82.1 (a)	83.6	92.3	80-120
Barium									
Beryllium	0.72	1.5 (a)	6.5	0-20	0.72	3.7 (a)	2.09	100.4	80-120
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper	13.0	10.9 (a)	17.6	0-20	13.0	23.2 (a)	10.5	97.6	80-120
Iron									
Lead	15.1	13.3	12.7	0-20	15.1	36.5	20.9	102.3	80-120
Magnesium									
Manganese									
Molybdenum									
Nickel	3.3	8.3 (a)	7.0	0-20	3.3	30.1 (a)	20.9	101.4	80-120
Potassium									
Selenium									
Silver									
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc	20.6	51.1 (a)	12.3	0-20	20.6	77.9 (a)	20.9	96.1	80-120

Associated samples MP30364: FA33973-1, FA33973-2

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Elevated reporting limit(s) due to matrix interference.
(b) Spike recovery indicates possible matrix interference and/or sample non-homogeneity.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

QC Batch ID: MP30364 Methods: SW846 6010C
Matrix Type: SOLID Units: mg/kg

Prep Date: 05/17/16

Metal	FA33973-1 Original	MSD	Spikelot MPFLICP2	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony	0.0	5.0 (a)	21.3	23.5N(b)	10.5	20
Arsenic	4.9	79.7 (a)	85.1	87.9	3.0	20
Barium						
Beryllium	0.72	3.4 (a)	2.13	84.7	8.5	20
Cadmium	anr					
Calcium						
Chromium	anr					
Cobalt						
Copper	13.0	21.6 (a)	10.6	80.9	7.1	20
Iron						
Lead	15.1	36.3	21.3	99.7	0.5	20
Magnesium						
Manganese						
Molybdenum						
Nickel	3.3	28.0 (a)	21.3	89.8	7.2	20
Potassium						
Selenium						
Silver						
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc	20.6	75.2 (a)	21.3	81.8	3.5	20

Associated samples MP30364: FA33973-1, FA33973-2

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Elevated reporting limit(s) due to matrix interference.
(b) Spike recovery indicates possible matrix interference and/or sample non-homogeneity.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

QC Batch ID: MP30364
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 05/17/16

Metal	BSP Result	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum				
Antimony	24.5	25	98.0	80-120
Arsenic	99.2	100	99.2	80-120
Barium				
Beryllium	2.6	2.5	104.0	80-120
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt				
Copper	13.3	12.5	106.4	80-120
Iron				
Lead	25.3	25	101.2	80-120
Magnesium				
Manganese				
Molybdenum				
Nickel	26.0	25	104.0	80-120
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc	25.9	25	103.6	80-120

Associated samples MP30364: FA33973-1, FA33973-2

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

QC Batch ID: MP30364 Methods: SW846 6010C
Matrix Type: SOLID Units: ug/l

Prep Date: 05/17/16

Metal	FA33973-1 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony	0.00	0.00	NC	0-10
Arsenic	121	84.6	30.2 (a)	0-10
Barium				
Beryllium	17.9	21.2	47.3 (a)	0-10
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt				
Copper	323	343	6.1	0-10
Iron				
Lead	376	401	6.5	0-10
Magnesium				
Manganese				
Molybdenum				
Nickel	81.9	227	2.7	0-10
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc	513	1730	20.6 (a)	0-10

Associated samples MP30364: FA33973-1, FA33973-2

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

POST DIGESTATE SPIKE SUMMARY

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

QC Batch ID: MP30364
Matrix Type: SOLID

Methods: SW846 6010C
Units: ug/l

Prep Date: 05/17/16

Metal	Sample ml	Final ml	FA33973-1 Raw	FA33973-1 Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony	9.8	10			68.4	0.2	5	100	68.4*(a)	80-120
Arsenic	9.8	10	121.2	118.776	215.2	0.2	5	100	96.4	80-120
Barium										
Beryllium	9.8	10	17.9	39.396	84.2	0.2	2.5	50	89.6	80-120
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper	9.8	10	323	316.54	405.8	0.2	5	100	89.3	80-120
Iron										
Lead	9.8	10	376.1	368.578	419.9	0.2	2.5	50	102.6	80-120
Magnesium										
Manganese										
Molybdenum										
Nickel	9.8	10	81.9	216.09	308.7	0.2	5	100	92.6	80-120
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc	9.8	10	513.3	1409.24	1641	0.2	12.5	250	92.7	80-120

Associated samples MP30364: FA33973-1, FA33973-2

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(**) Corr. sample result = Raw * (sample volume / final volume)
(anr) Analyte not requested
(a) Spike recovery indicates matrix interference and/or outside control limits due to high level in sample relative to spike amount.

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

QC Batch ID: MP30374
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 05/19/16

Metal	RL	IDL	MDL	MB raw	final
Aluminum	10	.7	1.8		
Antimony	1.0	.05	.065	-0.0050	<1.0
Arsenic	0.50	.065	.1	-0.060	<0.50
Barium	10	.05	.05		
Beryllium	0.25	.01	.025	-0.0050	<0.25
Cadmium	0.20	.01	.025		
Calcium	250	2.5	2.5		
Chromium	0.50	.05	.05		
Cobalt	2.5	.01	.025		
Copper	1.3	.05	.05	-0.0050	<1.3
Iron	15	.85	.85		
Lead	1.0	.05	.05	0.040	<1.0
Magnesium	250	1.8	1.8		
Manganese	0.75	.025	.025		
Molybdenum	2.5	.015	.025		
Nickel	2.0	.02	.025	-0.0050	<2.0
Potassium	500	10	10		
Selenium	1.0	.12	.12		
Silver	0.50	.035	.041		
Sodium	500	25	25		
Strontium	0.50	.025	.025		
Thallium	0.50	.055	.055		
Tin	2.5	.045	.045		
Titanium	0.50	.025	.025		
Vanadium	2.5	.025	.025		
Zinc	1.0	.15	.15	0.015	<1.0

Associated samples MP30374: FA33973-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

QC Batch ID: MP30374
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date:			05/19/16					05/19/16	
Metal	FA34018-1 Original	DUP	RPD	QC Limits	FA34018-1 Original	MS	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum	anr								
Antimony	0.0	0.0 (a)	NC	0-20	0.0	10.2 (a)	23.3	43.7N(c)	80-120
Arsenic	1.5	1.6 (a)	6.5	0-20	1.5	95.4 (a)	93.3	100.6	80-120
Barium	anr								
Beryllium	0.39	0.31 (a)	22.9 (b)	0-20	0.39	2.8 (a)	2.33	103.3	80-120
Cadmium	anr								
Calcium	anr								
Chromium	anr								
Cobalt	anr								
Copper	1.4	1.9 (a)	30.3 (b)	0-20	1.4	13.5 (a)	11.7	103.8	80-120
Iron	anr								
Lead	14.4	16.4 (a)	13.0	0-20	14.4	39.0 (a)	23.3	105.5	80-120
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	5.0	5.4 (a)	7.7	0-20	5.0	31.3 (a)	23.3	112.8	80-120
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	12.7	14.2 (a)	11.2	0-20	12.7	36.1 (a)	23.3	100.3	80-120

Associated samples MP30374: FA33973-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Elevated reporting limit(s) due to matrix interference.
(b) RPD acceptable due to low duplicate and sample concentrations.
(c) Spike recovery indicates possible matrix interference and/or sample non-homogeneity.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

QC Batch ID: MP30374 Methods: SW846 6010C
Matrix Type: SOLID Units: mg/kg

Prep Date: 05/19/16

Metal	FA34018-1 Original	MSD	Spikelot MPFLICP2	% Rec	MSD RPD	QC Limit
Aluminum	anr					
Antimony	0.0	10 (a)	22.7	44.0N(b)	2.0	20
Arsenic	1.5	88.9 (a)	90.9	96.1	7.1	20
Barium	anr					
Beryllium	0.39	2.6 (a)	2.27	97.2	7.4	20
Cadmium	anr					
Calcium	anr					
Chromium	anr					
Cobalt	anr					
Copper	1.4	13.0 (a)	11.4	102.0	3.8	20
Iron	anr					
Lead	14.4	43.1 (a)	22.7	126.2N(b	10.0	20
Magnesium	anr					
Manganese	anr					
Molybdenum						
Nickel	5.0	29.5 (a)	22.7	107.8	5.9	20
Potassium	anr					
Selenium	anr					
Silver	anr					
Sodium	anr					
Strontium						
Thallium	anr					
Tin						
Titanium						
Vanadium	anr					
Zinc	12.7	35.4 (a)	22.7	99.8	2.0	20

Associated samples MP30374: FA33973-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Elevated reporting limit(s) due to matrix interference.
(b) Spike recovery indicates possible matrix interference and/or sample non-homogeneity.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

QC Batch ID: MP30374
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 05/19/16

Metal	BSP Result	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum	anr			
Antimony	24.7	25	98.8	80-120
Arsenic	98.9	100	98.9	80-120
Barium	anr			
Beryllium	2.6	2.5	104.0	80-120
Cadmium	anr			
Calcium	anr			
Chromium	anr			
Cobalt	anr			
Copper	13.1	12.5	104.8	80-120
Iron	anr			
Lead	24.6	25	98.4	80-120
Magnesium	anr			
Manganese	anr			
Molybdenum				
Nickel	25.8	25	103.2	80-120
Potassium	anr			
Selenium	anr			
Silver	anr			
Sodium	anr			
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium	anr			
Zinc	25.5	25	102.0	80-120

Associated samples MP30374: FA33973-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

QC Batch ID: MP30374
Matrix Type: SOLID

Methods: SW846 6010C
Units: ug/l

Prep Date: 05/19/16

Metal	FA34018-1 Original	SDL 10:50%DIF		QC Limits
Aluminum	anr			
Antimony	0.00	0.00	NC	0-10
Arsenic	35.4	0.00	100.0(a)	0-10
Barium	anr			
Beryllium	9.00	0.00	100.0(a)	0-10
Cadmium	anr			
Calcium	anr			
Chromium	anr			
Cobalt	anr			
Copper	33.2	0.00	100.0(a)	0-10
Iron	anr			
Lead	333	291	12.8 (a)	0-10
Magnesium	anr			
Manganese	anr			
Molybdenum				
Nickel	117	130	11.6 (a)	0-10
Potassium	anr			
Selenium	anr			
Silver	anr			
Sodium	anr			
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium	anr			
Zinc	295	556	88.8 (a)	0-10

Associated samples MP30374: FA33973-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

POST DIGESTATE SPIKE SUMMARY

Login Number: FA33973
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

QC Batch ID: MP30374 Methods: SW846 6010C
Matrix Type: SOLID Units: ug/l

Prep Date: 05/19/16

Metal	Sample ml	Final ml	FA34018-1 Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony	9.8	10			79.7	0.2	5	100	79.7*(a)	80-120
Arsenic	9.8	10	35.4	34.692	136.1	0.2	5	100	101.4	80-120
Barium										
Beryllium	9.8	10	9	8.82	58.4	0.2	2.5	50	99.2	80-120
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper	9.8	10	33.2	32.536	139.1	0.2	5	100	106.6	80-120
Iron										
Lead	9.8	10	333.2	326.536	394.3	0.2	2.5	50	135.5*(a	80-120
Magnesium										
Manganese										
Molybdenum										
Nickel	9.8	10	116.5	114.17	227.5	0.2	5	100	113.3	80-120
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc	9.8	10	294.5	288.61	535.5	0.2	12.5	250	98.8	80-120

Associated samples MP30374: FA33973-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(**) Corr. sample result = Raw * (sample volume / final volume)
(anr) Analyte not requested
(a) Spike recovery indicates matrix interference and/or outside control limits due to high level in sample relative to spike amount.

Instrument Detection Limits

Job Number: FA33973
Account: ARCTXEL Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

Instrument ID: SSTRACE1 **Effective Date:** 01/27/15

Analyte	IDL ug/l
Aluminum	14
Antimony	1
Arsenic	1.3
Barium	1
Beryllium	.2
Cadmium	.2
Calcium	50
Chromium	1
Cobalt	.2
Copper	1
Iron	17
Lead	1
Magnesium	35
Manganese	.5
Molybdenum	.3
Nickel	.4
Potassium	200
Selenium	2.4
Silicon	5
Silver	.7
Sodium	500
Strontium	.5
Sulfur	5
Thallium	1.1
Tin	.9
Titanium	.5
Vanadium	.5
Zinc	3

The above applies to the following instrument runs:
MA13172

Instrument Detection Limits

Job Number: FA33973
Account: ARCTXEL Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

Instrument ID: SSTRACE2 **Effective Date:** 01/27/15

Analyte	IDL ug/l
Aluminum	14
Antimony	1
Arsenic	1.3
Barium	1
Beryllium	.2
Cadmium	.2
Calcium	50
Chromium	1
Cobalt	.2
Copper	1
Iron	17
Lead	1
Magnesium	35
Manganese	.5
Molybdenum	.3
Nickel	.4
Potassium	200
Selenium	2.4
Silicon	5
Silver	.7
Sodium	500
Strontium	.5
Sulfur	5
Thallium	1.1
Tin	.9
Titanium	.5
Vanadium	.5
Zinc	3

The above applies to the following instrument runs:
MA13165,MA13167,MA13171,MA13175

Instrument Linear Ranges

Job Number: FA33973
Account: ARCTXEL Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

Instrument ID: SSTRACE1 **Effective Date:** 08/13/13

Analyte	Linear Range ug/l
Aluminum	500000
Antimony	10000
Arsenic	10000
Barium	10000
Beryllium	10000
Cadmium	10000
Calcium	500000
Chromium	10000
Cobalt	10000
Copper	10000
Iron	500000
Lead	10000
Magnesium	500000
Manganese	10000
Molybdenum	10000
Nickel	10000
Potassium	80000
Selenium	10000
Silver	1000
Sodium	80000
Strontium	10000
Sulfur	10000
Thallium	10000
Tin	10000
Titanium	10000
Vanadium	10000
Zinc	10000

The above applies to the following instrument runs:
MA13172

Instrument Linear Ranges

Job Number: FA33973
Account: ARCTXEL Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

Instrument ID: SSTRACE2 **Effective Date:** 10/22/10

Analyte	Linear Range ug/l
Aluminum	500000
Antimony	10000
Arsenic	10000
Barium	10000
Beryllium	10000
Cadmium	10000
Calcium	500000
Chromium	10000
Cobalt	10000
Copper	10000
Iron	500000
Lead	10000
Magnesium	500000
Manganese	10000
Molybdenum	10000
Nickel	10000
Potassium	80000
Selenium	10000
Silver	1000
Sodium	80000
Strontium	10000
Thallium	10000
Tin	10000
Titanium	10000
Vanadium	10000
Zinc	10000

The above applies to the following instrument runs:
MA13165,MA13167,MA13171,MA13175

Metals Analysis

Raw Data

Zoom In ▶ Zoom Out

Sample Name: Blank Acquired: 5/17/2016 9:48:00 Type: Cal
Method: 60102007_041712(v124) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.0012	-.0094	-.0002	.0150	.0001	.0025	-.0006	.0002	.0000
Stddev	.0003	.0005	.0002	.0020	.0009	.0004	.0003	.0001	.0001
%RSD	22.80	5.780	110.5	13.43	1860.	16.31	47.42	93.29	368.3
#1	-.0012	-.0089	.0000	.0170	.0002	.0021	-.0006	.0001	.0000
#2	-.0014	-.0093	-.0001	.0130	.0009	.0029	-.0003	.0001	-.0001
#3	-.0009	-.0100	-.0004	.0151	-.0010	.0026	-.0008	.0003	.0001

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0052	.0013	.0012	-.0006	.0003	.0011	.0093	-.0010	-.0014
Stddev	.0000	.0002	.0039	.0001	.0000	.0001	.0010	.0002	.0006
%RSD	.6642	19.05	313.3	24.90	11.17	13.08	10.21	19.02	40.00
#1	.0052	.0016	-.0024	-.0006	.0003	.0012	.0098	-.0012	-.0018
#2	.0052	.0011	.0054	-.0008	.0003	.0011	.0100	-.0008	-.0008
#3	.0051	.0012	.0007	-.0005	.0004	.0009	.0082	-.0011	-.0016

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0009	-.0002	.0045	.0002	.0045	.0011	-.0037	-.0002	.0015
Stddev	.0001	.0003	.0001	.0001	.0007	.0001	.0003	.0001	.0004
%RSD	5.930	107.3	3.109	42.73	14.58	9.685	6.971	43.43	25.91
#1	.0009	-.0005	.0045	.0003	.0048	.0010	-.0034	-.0003	.0013
#2	.0010	.0000	.0046	.0001	.0038	.0012	-.0039	-.0001	.0013
#3	.0009	-.0003	.0044	.0003	.0050	.0011	-.0038	-.0002	.0020

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3115.9	7043.7	55074.	5247.0
Stddev	2.8	7.5	72.	50.9
%RSD	.09145	.10619	.13048	.96974
#1	3115.1	7035.9	55112.	5302.2
#2	3119.1	7044.4	54991.	5237.0
#3	3113.6	7050.8	55119.	5202.0

◀ Zoom In ▶ Zoom Out

Sample Name: LowStd Acquired: 5/17/2016 9:52:38 Type: Cal
Method: 60102007_041712(v124) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0361	1.600	.1220	6.845	3.782	2.429	2.645	1.278	.2235	.3565
Stddev	.0003	.004	.0002	.015	.007	.003	.001	.001	.0004	.0006
%RSD	.7704	.2339	.2020	.2256	.1962	.1233	.0517	.0724	.1867	.1795
#1	.0358	1.596	.1217	6.829	3.774	2.427	2.647	1.278	.2232	.3563
#2	.0363	1.601	.1221	6.847	3.784	2.432	2.644	1.277	.2232	.3560
#3	.0361	1.603	.1221	6.860	3.788	2.428	2.645	1.279	.2240	.3572

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.586	1.387	.2242	1.507	.6934	3.814	.8517	.6185	.1362	.0877
Stddev	.008	.002	.0003	.001	.0013	.005	.0002	.0008	.0003	.0002
%RSD	.4829	.1453	.1503	.0689	.1906	.1330	.0234	.1347	.1846	.2828
#1	1.582	1.385	.2241	1.507	.6927	3.808	.8517	.6194	.1360	.0874
#2	1.581	1.388	.2246	1.506	.6926	3.819	.8519	.6179	.1361	.0877
#3	1.595	1.389	.2239	1.508	.6949	3.814	.8515	.6181	.1365	.0879

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.2232	.2976	8.787	.9722	.2885	.3440	1.671
Stddev	.0004	.0001	.025	.0012	.0010	.0003	.001
%RSD	.1859	.0460	.2815	.1238	.3489	.0837	.0747
#1	.2236	.2975	8.759	.9722	.2886	.3437	1.672
#2	.2232	.2977	8.800	.9709	.2895	.3441	1.670
#3	.2228	.2977	8.803	.9733	.2875	.3443	1.672

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2837.5	6913.8	52844.	5151.4
Stddev	8.8	5.0	107.	17.9
%RSD	.30880	.07170	.20166	.34660
#1	2829.0	6908.1	52736.	5170.1
#2	2836.9	6915.8	52949.	5149.6
#3	2846.5	6917.4	52845.	5134.5

◀ Zoom In ▶ Zoom Out

Sample Name: MidStd Acquired: 5/17/2016 9:56:51 Type: Cal
Method: 60102007_041712(v124) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1447	6.707	.5048	27.54	15.38	10.08	10.75	5.106	.8924	1.430
Stddev	.0005	.012	.0010	.04	.03	.02	.02	.007	.0022	.002
%RSD	.3455	.1770	.1938	.1418	.1970	.2041	.1910	.1474	.2427	.1623
#1	.1452	6.705	.5037	27.51	15.37	10.07	10.73	5.098	.8933	1.433
#2	.1442	6.720	.5051	27.58	15.42	10.11	10.75	5.107	.8899	1.428
#3	.1447	6.697	.5055	27.51	15.36	10.07	10.77	5.113	.8940	1.430

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6.214	5.864	.9330	6.119	2.785	15.97	3.385	2.592	.5527	.3597
Stddev	.013	.011	.0004	.010	.010	.04	.004	.006	.0010	.0007
%RSD	.2152	.1887	.0460	.1569	.3740	.2712	.1184	.2252	.1796	.1905
#1	6.199	5.861	.9331	6.125	2.774	15.96	3.383	2.588	.5521	.3589
#2	6.220	5.876	.9325	6.108	2.787	16.02	3.383	2.589	.5522	.3598
#3	6.224	5.854	.9333	6.124	2.795	15.93	3.390	2.598	.5539	.3603

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.9398	1.163	35.29	3.955	1.183	1.379	6.796
Stddev	.0015	.002	.08	.000	.001	.001	.012
%RSD	.1551	.1458	.2254	.0065	.0774	.0905	.1810
#1	.9382	1.161	35.28	3.955	1.183	1.380	6.783
#2	.9401	1.163	35.37	3.955	1.183	1.377	6.796
#3	.9411	1.165	35.21	3.955	1.184	1.379	6.808

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2566.0	6653.2	51066.	5125.5
Stddev	7.6	18.1	213.	22.1
%RSD	.29731	.27269	.41656	.43102
#1	2570.2	6668.5	50928.	5150.6
#2	2570.5	6658.0	51311.	5117.3
#3	2557.2	6633.2	50960.	5108.8

◀ Zoom In ▶ Zoom Out

Sample Name: HighStd Acquired: 5/17/2016 10:00:09 Type: Cal
Method: 60102007_041712(v124) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.2945	13.66	1.032	55.88	31.08	20.28	21.52	10.24	1.794	2.889
Stddev	.0005	.06	.003	.19	.15	.09	.01	.01	.006	.006
%RSD	.1611	.4477	.2849	.3387	.4957	.4646	.0425	.0663	.3353	.2186
#1	.2951	13.62	1.034	55.84	31.03	20.23	21.53	10.25	1.801	2.894
#2	.2942	13.73	1.033	56.09	31.26	20.38	21.51	10.25	1.791	2.882
#3	.2943	13.63	1.029	55.72	30.96	20.22	21.52	10.24	1.790	2.891

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	11.79	11.80	1.870	12.05	5.612	31.89	6.783	5.335	1.127	.7296
Stddev	.06	.07	.012	.07	.002	.15	.008	.011	.002	.0012
%RSD	.4729	.5546	.6500	.6139	.0411	.4736	.1190	.1988	.2164	.1626
#1	11.77	11.77	1.863	12.11	5.613	31.81	6.790	5.332	1.128	.7305
#2	11.85	11.87	1.884	12.07	5.614	32.06	6.785	5.326	1.128	.7301
#3	11.75	11.75	1.863	11.96	5.610	31.79	6.774	5.347	1.124	.7283

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.811	2.294	71.31	7.732	2.389	2.768	13.64
Stddev	.003	.004	.92	.058	.004	.009	.01
%RSD	.1832	.1563	1.287	.7517	.1529	.3244	.0691
#1	1.812	2.297	70.25	7.772	2.385	2.778	13.64
#2	1.814	2.295	71.83	7.758	2.389	2.765	13.63
#3	1.808	2.290	71.85	7.665	2.392	2.761	13.64

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2349.4	6303.0	48925.	5009.9
Stddev	4.1	5.3	222.	46.4
%RSD	.17477	.08380	.45315	.92630
#1	2348.8	6296.9	48680.	5050.9
#2	2353.8	6306.1	48983.	4959.5
#3	2345.6	6306.0	49112.	5019.2

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: HSTD Acquired: 5/17/2016 10:04:52 Type: QC
Method: 60102007_041712(v124) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5021	80.01	4.022	4.007	3.995	79.60	3.993	3.992	3.988	4.022
Stddev	.0011	.48	.005	.013	.019	.58	.003	.002	.009	.008
%RSD	.2271	.6040	.1208	.3320	.4802	.7273	.0798	.0434	.2362	.1919
#1	.5034	80.53	4.021	4.022	4.016	80.14	3.994	3.991	3.981	4.030
#2	.5015	79.57	4.027	4.002	3.978	78.99	3.995	3.993	3.983	4.023
#3	.5014	79.94	4.018	3.997	3.991	79.66	3.989	3.990	3.998	4.014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	78.03	79.67	79.33	3.989	4.004	78.52	3.980	4.067	4.018	4.008
Stddev	.29	.44	.72	.033	.004	.55	.002	.004	.004	.004
%RSD	.3718	.5582	.9072	.8324	.1006	.6951	.0413	.1000	.0906	.1121
#1	78.29	80.12	79.88	3.951	4.002	79.08	3.982	4.067	4.022	4.007
#2	77.72	79.23	78.52	4.004	4.009	77.99	3.981	4.071	4.017	4.013
#3	78.07	79.67	79.60	4.012	4.002	78.50	3.978	4.063	4.014	4.004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.946	3.943	4.004	3.970	4.030	3.994	3.996
Stddev	.004	.006	.151	.049	.002	.003	.001
%RSD	.0900	.1559	3.775	1.228	.0493	.0836	.0273
#1	3.945	3.946	3.999	3.952	4.032	3.991	3.996
#2	3.950	3.935	3.855	3.933	4.030	3.995	3.996
#3	3.943	3.946	4.157	4.025	4.028	3.997	3.994
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: HSTD Acquired: 5/17/2016 10:04:52 Type: QC
Method: 60102007_041712(v124) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2345.5	6327.0	48903.	5017.8
Stddev	2.0	6.2	287.	94.2
%RSD	.08522	.09863	.58753	1.8776
#1	2347.1	6330.7	49085.	4970.7
#2	2346.1	6330.6	49052.	5126.3
#3	2343.3	6319.8	48572.	4956.5

Zoom In Zoom Out

Sample Name: ICV Acquired: 5/17/2016 10:10:39 Type: QC
Method: 60102007_041712(v124) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2487	41.79	2.024	2.124	2.093	42.60	2.058	2.079	2.068	2.033
Stddev	.0002	.05	.004	.003	.003	.10	.004	.005	.005	.005
%RSD	.0720	.1126	.1964	.1166	.1609	.2380	.2031	.2379	.2218	.2697
#1	.2488	41.74	2.020	2.124	2.089	42.49	2.053	2.073	2.065	2.039
#2	.2487	41.80	2.025	2.122	2.094	42.61	2.059	2.081	2.073	2.028
#3	.2485	41.83	2.028	2.127	2.096	42.69	2.061	2.083	2.066	2.032
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.40	42.45	42.98	2.105	1.922	42.73	2.087	2.047	2.048	2.074
Stddev	.06	.02	.13	.002	.006	.09	.003	.001	.007	.007
%RSD	.1460	.0582	.3019	.1113	.3331	.2100	.1619	.0465	.3467	.3250
#1	41.34	42.42	42.87	2.103	1.914	42.66	2.083	2.047	2.040	2.067
#2	41.41	42.46	42.95	2.105	1.924	42.71	2.088	2.046	2.054	2.080
#3	41.46	42.46	43.13	2.108	1.927	42.83	2.090	2.047	2.049	2.075
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0792	2.055	1.969	1.975	2.124	1.920	2.081
Stddev	.0006	.003	.004	.004	.004	.003	.004
%RSD	.8189	.1234	.1968	.1868	.1675	.1304	.1720
#1	.0797	2.052	1.965	1.975	2.127	1.918	2.077
#2	.0795	2.056	1.968	1.972	2.120	1.923	2.082
#3	.0785	2.057	1.973	1.979	2.125	1.919	2.084
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: ICV Acquired: 5/17/2016 10:10:39 Type: QC
Method: 60102007_041712(v124) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2525.8	6515.7	50142.	5042.0
Stddev	4.2	9.9	148.	29.3
%RSD	.16689	.15263	.29465	.58087
#1	2523.8	6524.7	50292.	5075.2
#2	2530.6	6517.3	49997.	5019.9
#3	2522.9	6505.0	50137.	5030.8

Zoom In Zoom Out

Sample Name: ICB Acquired: 5/17/2016 10:18:04 Type: QC
Method: 60102007_041712(v124) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0095	.0006	.0003	.0005	.0141	.0003	.0002	.0005	.0004
Stddev	.0002	.0117	.0001	.0001	.0001	.0019	.0001	.0001	.0001	.0002
%RSD	45.62	123.1	19.86	35.72	19.40	13.60	32.92	27.93	16.91	49.16
#1	.0002	.0202	.0005	.0003	.0004	.0120	.0004	.0002	.0006	.0006
#2	.0005	-.0031	.0005	.0002	.0005	.0149	.0002	.0002	.0005	.0005
#3	.0004	.0115	.0007	.0004	.0005	.0156	.0002	.0001	.0004	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0113	.0576	.0411	.0004	.0007	.0239	.0001	-.0009	-.0001	-.0018
Stddev	.0005	.0095	.0090	.0000	.0002	.0066	.0002	.0002	.0007	.0006
%RSD	4.012	16.53	21.89	8.384	22.92	27.51	120.2	25.83	1230.	34.39
#1	.0113	.0589	.0333	.0004	.0009	.0235	.0003	-.0007	-.0004	-.0019
#2	.0118	.0475	.0391	.0004	.0006	.0307	.0001	-.0008	-.0006	-.0022
#3	.0109	.0664	.0510	.0004	.0006	.0175	.0000	-.0011	.0008	-.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0019	.0002	.0005	.0007	.0001	.0003	.0002
Stddev	.0002	.0003	.0001	.0001	.0004	.0003	.0001
%RSD	9.763	153.1	17.00	9.232	314.0	86.08	33.17
#1	.0017	.0004	.0004	.0007	.0003	.0002	.0003
#2	.0021	.0005	.0006	.0007	-.0003	.0002	.0002
#3	.0019	-.0002	.0005	.0006	.0004	.0007	.0002
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: ICB Acquired: 5/17/2016 10:18:04 Type: QC
Method: 60102007_041712(v124) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3094.0	7053.9	54558.	5196.9
Stddev	3.2	2.6	218.	32.1
%RSD	.10414	.03722	.39899	.61726
#1	3097.4	7051.9	54402.	5227.1
#2	3091.0	7052.9	54465.	5163.2
#3	3093.6	7056.9	54807.	5200.3

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/17/2016 10:21:47 Type: QC
Method: 60102007_041712(v124) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0090	.2069	.0101	.2112	.0051	1.065	.0054	.0542	.0106	.0268
Stddev	.0004	.0141	.0001	.0009	.0001	.004	.0000	.0002	.0001	.0002
%RSD	4.935	6.836	1.255	.4269	2.258	.4269	.5022	.2852	.6344	.7985
#1	.0088	.2051	.0100	.2114	.0052	1.060	.0054	.0543	.0106	.0270
#2	.0095	.2219	.0103	.2102	.0052	1.068	.0054	.0540	.0107	.0266
#3	.0086	.1938	.0101	.2120	.0050	1.067	.0054	.0541	.0106	.0269
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3181	10.46	5.339	.0163	.0495	10.44	.0435	.0046	.0051	.0097
Stddev	.0010	.01	.041	.0000	.0002	.03	.0002	.0002	.0014	.0003
%RSD	.3241	.0891	.7591	.2830	.4738	.2830	.4463	4.664	27.70	2.649
#1	.3169	10.47	5.311	.0163	.0498	10.43	.0437	.0049	.0061	.0094
#2	.3186	10.45	5.320	.0163	.0493	10.42	.0435	.0044	.0056	.0099
#3	.3187	10.45	5.385	.0164	.0496	10.48	.0433	.0046	.0035	.0097
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0536	.0534	.0100	.0103	.0096	.0487	.0217
Stddev	.0001	.0002	.0001	.0000	.0005	.0002	.0001
%RSD	.2595	.3870	1.180	.4225	5.304	.4318	.3699
#1	.0538	.0534	.0099	.0103	.0102	.0485	.0217
#2	.0535	.0532	.0101	.0104	.0096	.0488	.0216
#3	.0536	.0536	.0100	.0103	.0091	.0489	.0217
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/17/2016 10:21:47 Type: QC
Method: 60102007_041712(v124) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2883.9	6871.1	52681.	5116.7
Stddev	.9	2.5	78.	16.1
%RSD	.03146	.03600	.14837	.31407
#1	2882.9	6868.2	52718.	5110.9
#2	2884.3	6872.7	52733.	5134.8
#3	2884.6	6872.4	52591.	5104.3

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/17/2016 10:28:10 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	515.1	.0001	.0005	.0000	490.1	-.0009	-.0003	.0008	.0000
Stddev	.0001	9.9	.0010	.0002	.0001	6.2	.0001	.0001	.0003	.0002
%RSD	49.77	1.919	1451.	50.75	477.7	1.266	11.56	19.73	41.68	2021.
#1	-.0001	525.0	-.0003	.0002	-.0001	484.6	-.0010	-.0002	.0008	.0002
#2	-.0003	515.2	-.0007	.0006	.0001	496.8	-.0008	-.0003	.0011	-.0001
#3	-.0003	505.2	.0012	.0006	.0000	488.8	-.0008	-.0003	.0004	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	182.6	.2668	520.1	.0000	-.0001	.2938	.0000	-.0001	.0000	.0003
Stddev	.2	.0221	1.1	.0000	.0002	.0093	.000	.0034	.003	.0020
%RSD	.1154	8.286	.2199	150.6	196.0	3.173	287.6	2687.	10510.	671.1
#1	182.3	.2526	519.9	.0000	-.0001	.2864	.0000	-.0040	-.0024	-.0007
#2	182.7	.2922	521.3	.0000	.0001	.2908	-.0001	.0017	-.0012	-.0010
#3	182.7	.2554	519.0	.0000	-.0004	.3043	.0000	.0020	.0036	.0026
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0160	-.0001	.0000	-.0002	.0008	.0001	-.0016
Stddev	.0010	.0003	.0000	.0001	.0014	.0001	.0000
%RSD	5.950	277.0	204.0	38.98	177.6	82.73	2.260
#1	.0160	.0000	.0001	-.0003	.0008	.0000	-.0016
#2	.0170	-.0004	.0000	-.0002	.0021	.0001	-.0016
#3	.0151	.0001	.0000	-.0001	-.0006	.0003	-.0016
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/17/2016 10:28:10 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2264.8	6051.2	44917.	4820.0
Stddev	2.4	6.8	55.	35.4
%RSD	.10486	.11184	.12287	.73352
#1	2266.2	6059.0	44880.	4805.8
#2	2266.1	6048.1	44980.	4794.0
#3	2262.0	6046.5	44890.	4860.3

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 5/17/2016 10:34:29 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.012	503.9	1.101	.5361	.5139	485.4	.9871	.4921	.5333	.5539
Stddev	.000	4.7	.003	.0014	.0012	6.2	.0010	.0002	.0019	.0006
%RSD	.0405	.9394	.2496	.2537	.2273	1.276	.0976	.0324	.3537	.1008
#1	1.012	503.9	1.099	.5348	.5126	492.0	.9880	.4923	.5312	.5533
#2	1.012	499.2	1.105	.5359	.5147	479.6	.9872	.4921	.5348	.5544
#3	1.013	508.7	1.100	.5375	.5145	484.7	.9861	.4920	.5339	.5539
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	184.1	.2762	513.8	.5286	.9473	.2797	.9928	.9824	1.020	1.026
Stddev	.3	.0052	.7	.0010	.0002	.0024	.0007	.0037	.002	.003
%RSD	.1606	1.886	.1289	.1861	.0236	.8577	.0689	.3721	.2330	.3104
#1	183.8	.2789	513.0	.5275	.9471	.2787	.9932	.9831	1.018	1.022
#2	184.1	.2796	514.1	.5291	.9475	.2825	.9921	.9856	1.018	1.029
#3	184.3	.2702	514.2	.5292	.9474	.2780	.9932	.9784	1.022	1.026
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0925	.9365	1.018	1.024	.9682	.4847	.9910
Stddev	.0003	.0004	.003	.002	.0031	.0009	.0016
%RSD	.3430	.0430	.2649	.1856	.3242	.1756	.1612
#1	.0922	.9369	1.015	1.022	.9718	.4838	.9927
#2	.0928	.9361	1.018	1.026	.9662	.4848	.9909
#3	.0925	.9365	1.021	1.024	.9665	.4855	.9895
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 5/17/2016 10:34:29 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2226.2	6007.8	44853.	4854.0
Stddev	6.8	12.0	99.	27.0
%RSD	.30764	.20039	.22095	.55702
#1	2218.8	5993.9	44930.	4824.5
#2	2227.5	6013.9	44887.	4877.6
#3	2232.3	6015.5	44741.	4859.8

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2016 10:40:41 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2505	40.20	2.005	2.011	1.994	40.43	2.020	2.019	2.021	2.005
Stddev	.0006	.11	.003	.003	.004	.14	.003	.002	.004	.008
%RSD	.2445	.2700	.1255	.1351	.1998	.3426	.1340	.0976	.2149	.3933
#1	.2510	40.08	2.007	2.009	1.989	40.27	2.023	2.021	2.020	2.010
#2	.2506	40.27	2.002	2.009	1.996	40.50	2.018	2.017	2.025	2.010
#3	.2498	40.27	2.005	2.014	1.996	40.53	2.019	2.019	2.017	1.996
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.40	40.39	40.13	2.042	2.017	40.44	2.026	1.985	2.006	2.009
Stddev	.13	.09	.22	.002	.003	.16	.003	.004	.003	.002
%RSD	.3165	.2292	.5467	.1044	.1380	.3913	.1405	.1870	.1328	.1078
#1	41.25	40.28	39.87	2.043	2.016	40.26	2.029	1.982	2.005	2.007
#2	41.43	40.44	40.24	2.043	2.016	40.54	2.024	1.989	2.009	2.011
#3	41.51	40.45	40.26	2.039	2.020	40.52	2.026	1.985	2.004	2.010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.082	2.047	2.009	2.046	2.006	2.022	2.019
Stddev	.002	.004	.004	.001	.004	.005	.004
%RSD	.0825	.1803	.2013	.0228	.2128	.2633	.1999
#1	2.082	2.052	2.005	2.046	2.001	2.020	2.023
#2	2.080	2.046	2.013	2.046	2.010	2.028	2.016
#3	2.084	2.045	2.010	2.047	2.006	2.018	2.017
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2016 10:40:41 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2544.5	6572.7	50783.	5105.9
Stddev	.8	15.6	164.	57.9
%RSD	.03323	.23703	.32205	1.1336
#1	2545.3	6556.3	50792.	5171.5
#2	2544.5	6587.2	50616.	5061.9
#3	2543.6	6574.6	50942.	5084.3

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2016 10:50:14 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	-.0012	-.0001	.0000	.0001	.0072	.0001	.0001	.0000	.0002
Stddev	.0006	.0039	.0006	.000	.0001	.0020	.0000	.0001	.0001	.0003
%RSD	189.4	311.9	676.9	220.6	116.5	27.77	28.13	72.22	285.3	129.6
#1	.0003	.0026	-.0005	-.0001	.0000	.0078	.0001	.0002	.0001	.0005
#2	-.0003	-.0051	-.0005	.0000	.0001	.0089	.0001	.0000	-.0001	.0002
#3	.0009	-.0013	.0006	.0000	.0001	.0050	.0002	.0002	.0001	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0021	.0495	.0401	.0001	-.0001	.0224	.0001	.0001	-.0010	-.0008
Stddev	.0011	.0175	.0160	.0000	.0001	.0091	.0001	.0006	.0007	.0011
%RSD	50.56	35.29	39.98	44.11	96.38	40.79	78.18	1293.	71.20	128.1
#1	.0012	.0584	.0350	.0001	.0000	.0249	.0002	.0006	-.0010	-.0019
#2	.0032	.0294	.0272	.0001	-.0002	.0299	.0000	-.0007	-.0017	-.0010
#3	.0018	.0608	.0580	.0001	-.0002	.0122	.0001	.0002	-.0003	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	.0001	.0000	-.0001	.0002	.0000	.0001
Stddev	.0003	.0003	.000	.0001	.0002	.0001	.0000
%RSD	56.64	451.6	1409.	131.7	82.30	1024.	28.61
#1	.0006	.0004	.0000	.0000	.0002	-.0001	.0001
#2	.0009	-.0002	-.0001	.0000	.0000	.0000	.0001
#3	.0002	.0000	.0001	-.0001	.0004	.0001	.0001
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2016 10:50:14 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3075.4	6926.7	54749.	5106.1
Stddev	6.1	2.6	155.	32.8
%RSD	.19836	.03725	.28242	.64156
#1	3079.5	6929.6	54608.	5123.1
#2	3078.3	6925.8	54914.	5068.3
#3	3068.4	6924.7	54724.	5126.8

Zoom In Zoom Out

Sample Name: FA33679-3 Acquired: 5/17/2016 10:54:09 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0010	.0389	4.165	3.425	.0003	149.2	.0003	.0015	.0011	.0056
Stddev	.0007	.0147	.003	.016	.0001	.7	.0001	.0002	.0005	.0005
%RSD	76.82	37.87	.0753	.4649	26.41	.4830	43.03	15.37	39.91	8.603
#1	.0001	.0230	4.162	3.440	.0002	149.7	.0002	.0018	.0015	.0061
#2	.0016	.0417	4.167	3.427	.0004	149.4	.0002	.0013	.0013	.0052
#3	.0012	.0521	4.167	3.408	.0004	148.3	.0004	.0016	.0006	.0054

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	217.0	4.580	36.92	.0308	.0391	109.4	.0098	.0137	-.0022	-.0043
Stddev	1.1	.016	.08	.0001	.0003	.6	.0002	.0013	.0001	.0038
%RSD	.5077	.3484	.2230	.3926	.7277	.5301	2.290	9.835	6.199	88.00
#1	217.8	4.568	36.87	.0307	.0392	109.8	.0099	.0137	-.0021	-.0048
#2	217.6	4.574	37.02	.0307	.0393	109.6	.0095	.0150	-.0022	-.0003
#3	215.8	4.598	36.88	.0309	.0388	108.7	.0099	.0123	-.0024	-.0077

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	15.73	.0005	.7895	.0039	.0021	.0161	.0152
Stddev	.00	.0001	.0041	.0001	.0025	.0004	.0001
%RSD	.0156	17.11	.5231	3.084	122.3	2.248	.9062
#1	15.72	.0004	.7923	.0040	.0020	.0159	.0151
#2	15.73	.0004	.7914	.0039	.0046	.0158	.0153
#3	15.73	.0006	.7847	.0038	-.0004	.0165	.0154

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2668.2	6524.8	50409.	5082.7
Stddev	3.4	10.5	102.	33.1
%RSD	.12665	.16105	.20178	.65201
#1	2671.7	6535.5	50505.	5067.6
#2	2668.1	6524.5	50302.	5059.8
#3	2664.9	6514.5	50419.	5120.7

Zoom In Zoom Out

Sample Name: MP30353-D1 Acquired: 5/17/2016 10:58:09 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0014	.0332	5.199	4.215	.0003	183.2	.0005	.0019	.0019	.0063
Stddev	.0004	.0036	.008	.005	.0002	.1	.0002	.0002	.0009	.0007
%RSD	27.30	10.80	.1588	.1191	71.67	.0776	45.63	10.40	49.57	11.71
#1	.0014	.0294	5.192	4.220	.0001	183.3	.0002	.0017	.0011	.0064
#2	.0018	.0365	5.208	4.215	.0005	183.4	.0006	.0020	.0016	.0070
#3	.0010	.0337	5.197	4.210	.0005	183.1	.0006	.0020	.0029	.0055

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	266.4	5.653	45.14	.0376	.0487	133.6	.0120	.0168	-.0012	-.0060
Stddev	.4	.036	.16	.0002	.0003	.3	.0002	.0007	.0006	.0018
%RSD	.1507	.6378	.3466	.4320	.6972	.2203	1.294	4.411	46.95	29.37
#1	266.8	5.613	45.03	.0377	.0489	133.9	.0119	.0168	-.0014	-.0060
#2	266.5	5.681	45.32	.0374	.0483	133.8	.0119	.0161	-.0006	-.0042
#3	266.0	5.666	45.07	.0375	.0490	133.3	.0122	.0175	-.0017	-.0078

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	19.42	.0001	.9728	.0042	.0024	.0189	.0168
Stddev	.02	.0001	.0011	.0002	.0007	.0003	.0001
%RSD	.0886	76.99	.1113	4.130	30.52	1.803	.6547
#1	19.40	.0001	.9716	.0041	.0028	.0185	.0169
#2	19.44	.0003	.9732	.0042	.0027	.0191	.0167
#3	19.42	.0001	.9737	.0044	.0015	.0191	.0168

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2649.1	6486.8	50322.	5090.5
Stddev	3.2	12.7	140.	40.8
%RSD	.12107	.19517	.27896	.80174
#1	2651.2	6496.5	50280.	5079.3
#2	2650.6	6472.5	50208.	5056.4
#3	2645.4	6491.4	50479.	5135.7

Zoom In Zoom Out

Sample Name: MP30353-S1 Acquired: 5/17/2016 11:02:10 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0525	28.60	7.177	6.418	.0539	211.0	.0531	.5268	.2173
Stddev	.0005	.03	.007	.020	.0002	.3	.0001	.0006	.0002
%RSD	.9312	.1000	.0938	.3139	.3701	.1334	.2180	.1175	.1150
#1	.0525	28.62	7.174	6.432	.0541	211.3	.0533	.5268	.2170
#2	.0530	28.61	7.185	6.427	.0537	210.7	.0530	.5274	.2175
#3	.0521	28.56	7.173	6.395	.0539	210.9	.0531	.5262	.2174

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2751	287.4	32.20	71.16	.5764	.5490	F160.2	.5493	.5145
Stddev	.0007	.7	.06	.19	.0004	.0005	.3	.0005	.0020
%RSD	.2541	.2441	.1722	.2721	.0631	.0878	.1669	.0843	.3893
#1	.2758	288.1	32.25	71.35	.5769	.5485	160.5	.5497	.5125
#2	.2745	287.5	32.14	70.97	.5762	.5492	160.1	.5495	.5145
#3	.2748	286.7	32.20	71.17	.5762	.5494	160.1	.5488	.5165

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5305	2.142	19.23	.5258	1.484	.5125	2.004	.5201	.5402
Stddev	.0032	.001	.00	.0009	.005	.0005	.005	.0009	.0002
%RSD	.6044	.0549	.0126	.1705	.3445	.0939	.2480	.1748	.0362
#1	.5333	2.141	19.23	.5250	1.489	.5121	1.998	.5190	.5400
#2	.5270	2.142	19.23	.5268	1.485	.5130	2.007	.5203	.5404
#3	.5312	2.144	19.23	.5255	1.478	.5123	2.007	.5208	.5401

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2578.7	6411.8	49896.	5069.9
Stddev	3.2	8.9	40.	34.8
%RSD	.12413	.13907	.08074	.68571
#1	2579.3	6402.4	49935.	5062.5
#2	2575.2	6412.9	49898.	5107.8
#3	2581.5	6420.1	49855.	5039.5

Zoom In Zoom Out

Sample Name: MP30353-S2 Acquired: 5/17/2016 11:06:07 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0513	27.89	6.986	6.302	.0520	208.4	.0521	.5116	.2118	.2652
Stddev	.0013	.13	.018	.018	.0002	1.0	.0001	.0007	.0009	.0010
%RSD	2.524	.4505	.2578	.2910	.4226	.4693	.2574	.1306	.4239	.3947
#1	.0514	27.87	6.968	6.290	.0522	208.3	.0521	.5109	.2128	.2656
#2	.0500	27.77	6.987	6.293	.0519	207.4	.0520	.5122	.2115	.2659
#3	.0526	28.02	7.004	6.323	.0518	209.4	.0523	.5117	.2111	.2640

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	280.2	31.46	70.09	.5595	.5350	157.7	.5357	.5010	.5155	2.091
Stddev	.6	.11	.28	.0019	.0008	.6	.0008	.0005	.0019	.007
%RSD	.2002	.3550	.4007	.3410	.1421	.3839	.1555	.1041	.3708	.3582
#1	279.9	31.55	70.06	.5616	.5341	157.7	.5361	.5006	.5136	2.083
#2	280.0	31.34	69.83	.5590	.5355	157.1	.5347	.5016	.5174	2.094
#3	280.9	31.50	70.39	.5578	.5354	158.3	.5363	.5007	.5155	2.097

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	19.08	.5157	1.447	.4973	1.947	.5053	.5313
Stddev	.04	.0012	.005	.0013	.004	.0014	.0007
%RSD	.2199	.2368	.3338	.2540	.2124	.2759	.1367
#1	19.04	.5148	1.446	.4988	1.943	.5067	.5318
#2	19.08	.5152	1.444	.4969	1.951	.5053	.5305
#3	19.12	.5171	1.453	.4963	1.947	.5040	.5317

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2580.9	6401.9	50099.	5030.4
Stddev	3.5	12.7	278.	52.6
%RSD	.13525	.19808	.55589	1.0461
#1	2581.4	6409.6	49798.	5033.3
#2	2584.1	6408.8	50347.	5081.5
#3	2577.1	6387.2	50151.	4976.4

Zoom In Zoom Out

Sample Name: MP30353-PS1 Acquired: 5/17/2016 11:10:04 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0503	2.807	5.362	4.525	.0533	190.9	.0553	.0558	.0573	.1152
Stddev	.0006	.018	.007	.023	.0001	1.0	.0001	.0003	.0003	.0003
%RSD	1.189	.6462	.1274	.4984	.1726	.5472	.1187	.5304	.4668	.2853
#1	.0506	2.793	5.355	4.550	.0534	192.1	.0553	.0557	.0574	.1149
#2	.0507	2.827	5.362	4.518	.0532	190.2	.0552	.0555	.0570	.1152
#3	.0496	2.800	5.369	4.506	.0534	190.5	.0552	.0561	.0575	.1155

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	266.6	16.32	50.70	.0928	.1536	145.2	.1207	.0656	.1124	.1023
Stddev	1.1	.10	.26	.0005	.0004	1.0	.0005	.0005	.0004	.0011
%RSD	.4151	.6194	.5185	.5175	.2509	.7217	.4160	.7895	.3196	1.064
#1	267.8	16.38	51.00	.0932	.1538	146.4	.1210	.0650	.1120	.1031
#2	265.9	16.20	50.51	.0930	.1539	144.6	.1202	.0659	.1128	.1029
#3	266.0	16.38	50.59	.0923	.1532	144.5	.1211	.0659	.1125	.1011

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	19.73	.0537	1.016	.1093	.1015	.0709	.2834
Stddev	.01	.0003	.004	.0004	.0014	.0004	.0003
%RSD	.0751	.6289	.3579	.3451	1.384	.5236	.1078
#1	19.72	.0540	1.020	.1096	.1006	.0710	.2837
#2	19.72	.0536	1.014	.1095	.1007	.0713	.2834
#3	19.75	.0533	1.014	.1089	.1031	.0705	.2831

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2608.4	6335.6	49977.	5021.0
Stddev	4.4	5.0	278.	39.3
%RSD	.16883	.07897	.55563	.78196
#1	2604.1	6331.3	49701.	4980.7
#2	2608.2	6334.4	49973.	5059.1
#3	2612.9	6341.1	50257.	5023.0

Zoom In Zoom Out

Sample Name: MP30353-SD1 Acquired: 5/17/2016 11:14:04 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0042	.0948	5.376	4.342	.0000	190.9	.0026	.0020	.0021	.0099
Stddev	.0010	.0350	.013	.018	.0007	.9	.0002	.0011	.0019	.0014
%RSD	24.38	36.88	.2437	.4227	3466.	.4513	7.240	53.47	89.73	14.24
#1	.0053	.0648	5.380	4.356	.0004	191.9	.0027	.0017	.0000	.0099
#2	.0038	.1332	5.362	4.321	.0004	190.6	.0026	.0032	.0025	.0085
#3	.0034	.0865	5.388	4.349	-.0008	190.2	.0024	.0011	.0037	.0113

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	274.9	6.462	47.18	.0390	.0437	139.6	.0115	.0134	-.0180	-.0024
Stddev	.2	.340	.23	.0003	.0005	.8	.0014	.0055	.0077	.0062
%RSD	.0784	5.261	.4920	.7930	1.235	.5668	12.18	40.95	42.61	254.3
#1	275.0	6.725	47.30	.0389	.0440	140.4	.0131	.0142	-.0171	.0012
#2	274.6	6.078	47.33	.0387	.0431	139.5	.0112	.0075	-.0261	-.0095
#3	275.0	6.582	46.92	.0393	.0441	138.8	.0104	.0184	-.0108	.0011

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	20.56	-.0021	.9778	.0072	.0028	.0190	.0820
Stddev	.02	.0015	.0015	.0008	.0095	.0006	.0003
%RSD	.1043	70.18	.1524	11.39	342.1	3.374	.3272
#1	20.59	-.0012	.9791	.0073	.0020	.0187	.0821
#2	20.54	-.0038	.9762	.0063	.0127	.0184	.0823
#3	20.56	-.0013	.9783	.0079	-.0063	.0197	.0818

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2852.1	6620.9	53275.	5173.8
Stddev	1.2	10.1	319.	56.3
%RSD	.04145	.15320	.59793	1.0875
#1	2853.4	6632.1	53542.	5167.7
#2	2851.1	6618.1	53360.	5120.9
#3	2851.8	6612.4	52923.	5232.9

Zoom In Zoom Out

Sample Name: FA33950-4 Acquired: 5/17/2016 11:18:08 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0045	125.0	.0853	.9268	.0057	136.7	.0082	.0866	.4845
Stddev	.0003	.6	.0011	.0034	.0001	.4	.0002	.0002	.0017
%RSD	6.780	.4423	1.292	.3638	2.471	.3140	2.198	.2352	.3492
#1	.0043	124.5	.0840	.9231	.0059	136.3	.0084	.0865	.4835
#2	.0044	125.6	.0862	.9297	.0056	137.2	.0080	.0865	.4865
#3	.0049	124.9	.0856	.9277	.0057	136.6	.0082	.0868	.4837

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.6445	332.5	20.64	55.15	F9.213	.0470	1.420	.2195	.9595
Stddev	.0022	1.6	.09	.24	.046	.0001	.012	.0006	.0025
%RSD	.3484	.4811	.4258	.4335	.5002	.1796	.8632	.2618	.2562
#1	.6426	330.7	20.58	54.94	9.169	.0470	1.416	.2195	.9595
#2	.6470	333.8	20.74	55.41	9.210	.0471	1.434	.2201	.9619
#3	.6439	332.9	20.59	55.10	9.261	.0471	1.410	.2189	.9570

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0024	-.0038	3.694	.0510	.9077	5.775	.0001	.3127	1.500
Stddev	.0017	.0013	.001	.0006	.0038	.010	.0011	.0002	.002
%RSD	72.34	33.50	.0365	1.209	.4190	.1686	975.1	.0652	.1560
#1	-.0035	-.0048	3.694	.0512	.9033	5.786	.0007	.3127	1.499
#2	-.0004	-.0023	3.692	.0514	.9100	5.767	-.0011	.3125	1.503
#3	-.0032	-.0042	3.694	.0503	.9098	5.772	.0008	.3129	1.498

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2698.8	7729.3	61435.	6146.1
Stddev	6.8	18.9	105.	35.3
%RSD	.25213	.24469	.17128	.57382
#1	2699.3	7720.9	61331.	6169.4
#2	2691.8	7716.1	61541.	6105.5
#3	2705.3	7751.0	61434.	6163.3

Zoom In Zoom Out

Sample Name: FA33905-1 Acquired: 5/17/2016 11:22:25 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 25.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0040	250.3	.0623	9.792	.0366	30.80	.0037	.0033	.2362	.0085
Stddev	.0042	.9	.0081	.046	.0008	.10	.0015	.0011	.0065	.0057
%RSD	105.5	.3625	12.99	.4687	2.271	.3394	41.90	32.44	2.757	67.68
#1	-.0007	249.5	.0590	9.752	.0357	30.85	.0052	.0025	.2436	.0023
#2	.0052	250.2	.0715	9.782	.0368	30.68	.0021	.0045	.2330	.0094
#3	.0076	251.3	.0564	9.842	.0373	30.87	.0037	.0029	.2318	.0137

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	79.02	2.428	2.879	.0728	-.0156	1.230	.0371	.3909	-.0475	-.0221
Stddev	.29	.224	.695	.0008	.0028	.079	.0021	.0104	.0242	.0150
%RSD	.3724	9.212	24.15	1.070	17.92	6.439	5.769	2.667	50.99	67.95
#1	78.69	2.677	2.098	.0735	-.0186	1.158	.0346	.4029	-.0677	-.0274
#2	79.18	2.244	3.431	.0720	-.0151	1.315	.0383	.3845	-.0206	-.0052
#3	79.21	2.364	3.107	.0728	-.0131	1.218	.0383	.3852	-.0542	-.0338

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	7.379	.0214	11.12	.9012	-.0088	.1431	.2484
Stddev	.032	.0011	.05	.0104	.0058	.0009	.0019
%RSD	.4389	5.195	.4656	1.154	65.91	.6516	.7708
#1	7.347	.0211	11.08	.9131	-.0094	.1440	.2498
#2	7.378	.0205	11.12	.8939	-.0027	.1421	.2462
#3	7.412	.0226	11.18	.8966	-.0143	.1433	.2492

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2992.3	7835.3	63368.	5992.4
Stddev	6.4	13.8	268.	29.4
%RSD	.21429	.17627	.42346	.48980
#1	2997.0	7838.6	63170.	5967.7
#2	2994.8	7847.2	63673.	6024.9
#3	2985.0	7820.2	63259.	5984.6

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: FA33964-2 Acquired: 5/17/2016 11:26:29 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0010	38.10	.0098	.1100	.0014	586.4	.0018	.0037	.1082	.0099
Stddev	.0006	.04	.0011	.0001	.0002	9.2	.0001	.0001	.0007	.0005
%RSD	63.26	.1026	11.08	.0958	14.69	1.563	3.614	1.904	.6352	5.253
#1	.0007	38.07	.0086	.1100	.0013	589.5	.0018	.0038	.1075	.0101
#2	.0006	38.14	.0107	.1099	.0013	593.7	.0018	.0038	.1081	.0103
#3	.0017	38.07	.0101	.1101	.0016	576.1	.0017	.0037	.1089	.0093

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	15.70	2.650	18.17	.1335	.0003	.8240	.0234	.4651	-.0021	.0035
Stddev	.05	.027	.06	.0004	.0001	.0123	.0005	.0030	.0006	.0022
%RSD	.2879	1.020	.3103	.3119	30.50	1.499	1.988	.6545	29.51	63.66
#1	15.69	2.620	18.23	.1331	.0002	.8223	.0230	.4631	-.0022	.0019
#2	15.75	2.671	18.16	.1334	.0003	.8371	.0239	.4686	-.0026	.0025
#3	15.66	2.659	18.12	.1339	.0002	.8126	.0232	.4636	-.0014	.0061

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	4.055	.0179	.8280	.3255	-.0030	.0855	.3916
Stddev	.010	.0006	.0029	.0010	.0012	.0009	.0009
%RSD	.2487	3.284	.3500	.3139	39.63	1.089	.2226
#1	4.050	.0175	.8297	.3246	-.0022	.0847	.3909
#2	4.066	.0176	.8296	.3253	-.0044	.0853	.3926
#3	4.048	.0185	.8246	.3266	-.0025	.0866	.3913

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2553.7	6697.0	53393.	5343.7
Stddev	10.5	19.4	386.	44.5
%RSD	.41170	.28925	.72380	.83290
#1	2559.0	6701.3	53392.	5333.9
#2	2541.6	6675.8	53779.	5304.9
#3	2560.4	6713.9	53007.	5392.3

Zoom In Zoom Out

Sample Name: FA33865-1 Acquired: 5/17/2016 11:30:41 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0025	22.67	.0022	.1088	.0018	4183.	-.0022	.0035	.1599	.0132
Stddev	.0009	.04	.0067	.0022	.0006	41.	.0003	.0012	.0013	.0011
%RSD	34.36	.1759	309.2	1.986	32.75	.9746	14.89	35.18	.8108	8.540
#1	.0016	22.67	-.0031	.1111	.0020	4202.	-.0026	.0033	.1607	.0127
#2	.0027	22.70	-.0001	.1084	.0011	4136.	-.0020	.0024	.1584	.0145
#3	.0033	22.62	.0097	.1068	.0022	4210.	-.0020	.0048	.1607	.0124

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	10.50	2.392	37.81	.3016	-.0127	6.630	.0281	.0125	-.0123	-.0075
Stddev	.04	.233	.13	.0004	.0001	.170	.0007	.0044	.0063	.0045
%RSD	.4065	9.726	.3505	.1337	1.180	2.568	2.330	35.67	51.42	60.28
#1	10.55	2.449	37.82	.3012	-.0125	6.826	.0279	.0149	-.0182	-.0023
#2	10.49	2.137	37.67	.3016	-.0128	6.535	.0276	.0152	-.0056	-.0103
#3	10.47	2.591	37.93	.3020	-.0127	6.528	.0289	.0073	-.0130	-.0100

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.117	.0122	7.747	.0820	-.0180	.1129	.4027
Stddev	.009	.0008	.051	.0015	.0030	.0040	.0007
%RSD	.2879	6.264	.6589	1.824	16.49	3.527	.1818
#1	3.125	.0115	7.805	.0834	-.0213	.1122	.4023
#2	3.117	.0121	7.711	.0823	-.0155	.1171	.4036
#3	3.107	.0130	7.724	.0804	-.0173	.1092	.4024

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2492.0	6375.0	50659.	5163.1
Stddev	6.3	2.7	125.	21.1
%RSD	.25151	.04198	.24649	.40850
#1	2495.8	6374.4	50745.	5151.3
#2	2495.4	6378.0	50717.	5187.4
#3	2484.7	6372.8	50516.	5150.5

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2016 11:34:55 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2492	40.90	2.051	2.031	1.966	40.91	2.027	2.031	2.045	1.985
Stddev	.0005	.04	.008	.003	.004	.04	.001	.001	.003	.003
%RSD	.2144	.0975	.3717	.1668	.2139	.0857	.0355	.0286	.1514	.1440
#1	.2497	40.89	2.043	2.028	1.961	40.87	2.027	2.031	2.041	1.989
#2	.2487	40.87	2.054	2.035	1.967	40.91	2.028	2.032	2.046	1.985
#3	.2491	40.95	2.057	2.031	1.969	40.94	2.026	2.031	2.047	1.983
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.63	40.49	40.02	2.017	2.038	41.29	2.064	1.964	2.043	2.048
Stddev	.10	.03	.05	.003	.006	.05	.002	.002	.007	.007
%RSD	.2520	.0703	.1153	.1363	.3197	.1275	.0794	.1213	.3550	.3619
#1	40.52	40.49	40.07	2.017	2.031	41.35	2.062	1.967	2.037	2.044
#2	40.64	40.51	40.02	2.015	2.039	41.27	2.064	1.963	2.041	2.043
#3	40.73	40.46	39.97	2.020	2.044	41.25	2.065	1.963	2.051	2.056
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.126	2.112	1.990	2.008	1.990	2.026	2.029
Stddev	.002	.004	.005	.003	.003	.003	.003
%RSD	.1107	.1638	.2661	.1388	.1679	.1418	.1293
#1	2.124	2.110	1.984	2.009	1.992	2.024	2.031
#2	2.125	2.111	1.992	2.005	1.986	2.024	2.029
#3	2.129	2.116	1.994	2.010	1.992	2.029	2.026
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2016 11:34:55 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2529.5	6427.0	50913.	5063.4
Stddev	3.4	2.5	107.	13.6
%RSD	.13528	.03953	.21054	.26779
#1	2526.0	6428.5	51015.	5054.3
#2	2529.7	6424.1	50922.	5057.0
#3	2532.8	6428.4	50801.	5079.0

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2016 11:38:50 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0160	.0008	.0002	.0005	.0245	.0003	.0003	.0003
Stddev	.0004	.0039	.0002	.0002	.0001	.0030	.0001	.0001	.0002
%RSD	403.0	24.30	24.46	71.80	30.16	12.13	20.69	16.84	61.32
#1	.0003	.0204	.0006	.0000	.0003	.0211	.0004	.0004	.0005
#2	.0004	.0129	.0008	.0003	.0006	.0260	.0003	.0003	.0003
#3	-.0004	.0148	.0010	.0004	.0005	.0265	.0002	.0003	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008	.0260	.1139	.0268	.0005	F.0020	.0529	.0004	.0003
Stddev	.0001	.0030	.0233	.0071	.0000	.0007	.0070	.0001	.0003
%RSD	16.00	11.65	20.46	26.35	7.428	32.90	13.20	25.97	100.5
#1	.0008	.0267	.1016	.0187	.0005	.0027	.0600	.0003	.0000
#2	.0008	.0285	.0993	.0298	.0005	.0019	.0460	.0005	.0002
#3	.0006	.0226	.1408	.0318	.0004	.0014	.0528	.0003	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0001	.0016	.0001	.0005	.0011	.0003	.0004	.0003
Stddev	.0006	.0016	.0005	.0002	.0001	.0002	.0011	.0001	.0001
%RSD	4851.	1552.	28.22	222.0	19.93	14.20	378.0	27.93	21.47
#1	.0003	.0003	.0016	.0004	.0004	.0013	.0015	.0003	.0004
#2	.0004	-.0016	.0021	.0000	.0006	.0012	.0000	.0005	.0003
#3	-.0007	.0016	.0012	.0000	.0005	.0010	-.0006	.0003	.0002
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2016 11:38:50 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3075.3	6833.1	55102.	5202.9
Stddev	5.8	14.8	40.	15.6
%RSD	.18788	.21676	.07255	.30044
#1	3072.9	6845.7	55148.	5185.4
#2	3081.9	6836.8	55075.	5207.9
#3	3071.1	6816.7	55082.	5215.4

Zoom In Zoom Out

Sample Name: FA33865-2 Acquired: 5/17/2016 11:43:00 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0022	122.6	.0500	.4197	.0052	2293.	-.0003	.0087	.3336	.1646
Stddev	.0019	.2	.0017	.0008	.0004	25.	.0002	.0001	.0007	.0010
%RSD	89.37	.1979	3.422	.1924	7.807	1.100	77.41	1.356	.2050	.6332
#1	.0000	122.9	.0480	.4196	.0051	2265.	-.0002	.0088	.3333	.1634
#2	.0030	122.4	.0510	.4189	.0049	2302.	-.0005	.0088	.3344	.1654
#3	.0035	122.6	.0508	.4205	.0057	2312.	-.0001	.0086	.3331	.1650

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	66.33	10.37	26.64	.3837	.0045	3.509	.0618	.1274	-.0093	.0108
Stddev	.10	.04	.15	.0002	.0005	.040	.0013	.0023	.0015	.0059
%RSD	.1491	.3722	.5577	.0486	12.18	1.144	2.048	1.813	16.55	55.06
#1	66.33	10.36	26.59	.3836	.0050	3.554	.0608	.1269	-.0076	.0170
#2	66.24	10.41	26.53	.3837	.0045	3.495	.0615	.1299	-.0104	.0053
#3	66.43	10.34	26.81	.3839	.0039	3.478	.0632	.1253	-.0100	.0100

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	8.379	.0206	8.933	.2945	-.0092	.2138	.1435
Stddev	.004	.0013	.014	.0010	.0019	.0004	.0006
%RSD	.0468	6.098	.1536	.3561	20.77	.1694	.4326
#1	8.374	.0215	8.948	.2933	-.0083	.2139	.1429
#2	8.382	.0210	8.924	.2953	-.0079	.2140	.1434
#3	8.381	.0191	8.926	.2949	-.0114	.2133	.1441

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2457.4	6590.0	52347.	5345.3
Stddev	1.3	11.3	70.	15.2
%RSD	.05296	.17122	.13279	.28431
#1	2456.0	6601.0	52272.	5355.9
#2	2458.5	6590.6	52410.	5352.1
#3	2457.8	6578.5	52359.	5327.9

Zoom In Zoom Out

Sample Name: FA33865-3 Acquired: 5/17/2016 11:47:12 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0011	12.14	.0027	.0808	.0017	2446.	-.0008	.0017	.1637	.0112
Stddev	.0008	.03	.0028	.0009	.0004	22.	.0001	.0005	.0008	.0015
%RSD	72.93	.2099	104.1	1.054	22.77	.9148	12.50	31.27	.4937	12.95
#1	.0002	12.12	.0032	.0811	.0013	2464.	-.0007	.0021	.1644	.0109
#2	.0012	12.17	.0051	.0815	.0020	2421.	-.0007	.0019	.1641	.0128
#3	.0018	12.13	-.0004	.0799	.0018	2453.	-.0009	.0011	.1628	.0100

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	6.860	1.396	21.28	.1761	.0015	5.634	.0278	.0117	-.0058	-.0048
Stddev	.032	.029	.04	.0005	.0006	.051	.0008	.0011	.0051	.0018
%RSD	.4604	2.078	.1772	.2701	37.74	.8957	2.767	9.165	87.58	38.44
#1	6.888	1.373	21.31	.1763	.0020	5.672	.0269	.0111	-.0091	-.0067
#2	6.825	1.386	21.24	.1765	.0009	5.577	.0283	.0112	.0000	-.0045
#3	6.866	1.429	21.29	.1756	.0015	5.652	.0281	.0130	-.0083	-.0031

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.468	.0175	4.981	.0691	-.0103	.0676	.0604
Stddev	.003	.0007	.009	.0004	.0041	.0008	.0004
%RSD	.1292	3.823	.1878	.5202	39.59	1.135	.5824
#1	2.465	.0168	4.991	.0688	-.0060	.0675	.0605
#2	2.472	.0177	4.973	.0690	-.0141	.0670	.0600
#3	2.468	.0181	4.978	.0695	-.0107	.0685	.0607

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2439.2	6460.1	51857.	5328.1
Stddev	1.1	6.1	60.	13.8
%RSD	.04556	.09497	.11638	.25899
#1	2439.7	6453.3	51841.	5334.2
#2	2437.9	6465.3	51806.	5312.3
#3	2439.9	6461.7	51924.	5337.8

Zoom In Zoom Out

Sample Name: FA33931-1 Acquired: 5/17/2016 11:51:24 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 500.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.4780	882.8	.0779	2.325	.0566	368.4	.1648	.2047	1.536
Stddev	.1935	4.5	.1830	.043	.0348	5.5	.0163	.0218	.125
%RSD	40.48	.5066	234.7	1.838	61.45	1.483	9.906	10.67	8.106
#1	.6780	880.4	.0513	2.310	.0804	373.8	.1834	.1872	1.523
#2	.4642	880.1	.2728	2.291	.0727	368.4	.1531	.2292	1.666
#3	.2917	888.0	-.0902	2.373	.0167	362.9	.1577	.1978	1.418

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	F2164.	253.3	24.54	32.68	4.325	-.0332	22.34	5.526	109.7
Stddev	2.	3.8	2.92	4.67	.007	.0410	6.51	.025	.2
%RSD	.0905	1.511	11.91	14.29	.1692	123.3	29.13	.4443	.2252
#1	2166.	251.0	25.60	30.77	4.327	-.0233	21.88	5.504	109.8
#2	2162.	251.1	26.78	38.01	4.317	-.0783	29.07	5.552	109.4
#3	2165.	257.7	21.23	29.28	4.331	.0018	16.07	5.521	109.7

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.5977	-.5127	3.801	6.896	2.257	4.246	-.1843	.2604	F3240.
Stddev	.3070	.2241	.077	.129	.073	.014	.0468	.0310	4.
%RSD	51.36	43.70	2.016	1.872	3.253	.3230	25.39	11.89	.1253
#1	-.2531	-.7149	3.888	6.846	2.279	4.254	-.2080	.2840	3236.
#2	-.6979	-.5515	3.772	6.800	2.176	4.255	-.2145	.2719	3242.
#3	-.8420	-.2719	3.743	7.043	2.318	4.231	-.1304	.2254	3243.

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3035.9	6824.0	55100.	5245.3
Stddev	5.8	12.6	454.	27.7
%RSD	.19239	.18414	.82348	.52802
#1	3041.6	6838.4	55246.	5260.1
#2	3036.2	6818.1	54591.	5262.4
#3	3029.9	6815.5	55463.	5213.3

Zoom In Zoom Out

Sample Name: FA33931-2 Acquired: 5/17/2016 11:55:31 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 500.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.6379	1668.	.2421	2.430	.0138	440.5	.2577	.3501	2.708
Stddev	.1413	2.	.2086	.186	.0250	3.4	.0293	.0189	.052
%RSD	22.15	.1248	86.15	7.669	181.8	.7739	11.36	5.405	1.938
#1	.4846	1670.	.0035	2.241	.0006	436.8	.2838	.3303	2.764
#2	.6661	1666.	.3334	2.614	.0426	441.4	.2631	.3680	2.660
#3	.7629	1669.	.3895	2.434	-.0020	443.4	.2261	.3520	2.699

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	F3731.	525.9	24.43	45.76	8.503	.2267	29.01	8.621	170.7
Stddev	23.	4.1	10.30	2.89	.020	.0486	4.74	.056	.3
%RSD	.6161	.7727	42.15	6.319	.2289	21.44	16.33	.6537	.1987
#1	3735.	521.3	12.92	45.14	8.481	.2795	30.12	8.685	170.4
#2	3752.	527.2	27.60	43.23	8.514	.2167	33.09	8.596	170.8
#3	3706.	529.1	32.77	48.92	8.515	.1838	23.81	8.581	171.1

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.6686	-.3842	4.332	10.50	2.464	5.294	.0324	.4391	F4455.
Stddev	.1945	.3168	.165	.19	.064	.029	.0537	.1122	4.
%RSD	29.09	82.46	3.807	1.811	2.596	.5400	165.6	25.55	.0919
#1	-.5911	-.1580	4.432	10.52	2.477	5.312	.0921	.3382	4450.
#2	-.8899	-.2484	4.422	10.69	2.395	5.308	.0173	.4190	4458.
#3	-.5247	-.7463	4.142	10.31	2.521	5.261	-.0121	.5599	4457.

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3048.8	6906.3	55393.	5322.0
Stddev	1.2	3.6	37.	48.9
%RSD	.03979	.05155	.06719	.91938
#1	3047.4	6905.2	55432.	5378.0
#2	3049.6	6903.4	55358.	5287.3
#3	3049.3	6910.3	55390.	5300.7

Zoom In Zoom Out

Sample Name: FA33931-3 Acquired: 5/17/2016 11:59:46 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 500.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.4152	917.5	.0129	1.675	.0256	353.5	.1827	.1839	1.516
Stddev	.0888	3.6	.4107	.015	.0306	2.2	.0071	.0511	.118
%RSD	21.40	.3880	3181.	.8635	119.4	.6333	3.907	27.77	7.798
#1	.4941	913.7	-.2777	1.672	.0064	351.8	.1745	.1940	1.381
#2	.3190	918.0	-.1664	1.662	.0609	356.0	.1873	.2292	1.564
#3	.4324	920.7	.4828	1.691	.0096	352.6	.1863	.1286	1.602

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	F2390.	280.5	33.71	32.57	4.695	-.0471	29.94	5.443	112.4
Stddev	2.	2.3	8.81	10.27	.019	.0285	3.24	.099	.1
%RSD	.0633	.8232	26.15	31.52	.4000	60.44	10.82	1.821	.1331
#1	2390.	279.2	34.68	23.75	4.676	-.0428	26.64	5.536	112.5
#2	2389.	279.1	41.99	43.84	4.697	-.0210	33.11	5.339	112.2
#3	2392.	283.2	24.45	30.12	4.713	-.0775	30.07	5.453	112.5

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.7474	-.5538	4.842	6.377	1.947	3.832	-.0152	.2367	F3187.
Stddev	.2789	.2381	.215	.041	.025	.047	.0552	.1100	2.
%RSD	37.32	43.00	4.449	.6390	1.290	1.218	363.0	46.46	.0685
#1	-1.027	-.2864	4.676	6.361	1.918	3.884	-.0127	.2934	3186.
#2	-.7452	-.7430	4.764	6.424	1.962	3.794	-.0717	.1100	3186.
#3	-.4695	-.6320	5.085	6.347	1.962	3.819	.0387	.3069	3190.

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3047.8	6876.3	55268.	5256.8
Stddev	3.6	7.5	105.	37.7
%RSD	.11651	.10955	.19062	.71794
#1	3043.7	6875.8	55234.	5296.3
#2	3049.3	6884.1	55184.	5252.9
#3	3050.3	6869.1	55386.	5221.1

Zoom In Zoom Out

Sample Name: FA33931-4 Acquired: 5/17/2016 12:03:52 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 500.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.5717	1088.	.3409	2.164	.0073	295.7	.2099	.2219	1.868
Stddev	.1803	9.	.1627	.098	.0089	.3	.0193	.0182	.148
%RSD	31.54	.8197	47.72	4.506	121.3	.0872	9.208	8.209	7.930
#1	.3699	1097.	.4203	2.256	.0006	296.0	.1902	.2429	2.011
#2	.7169	1080.	.4487	2.175	.0174	295.6	.2288	.2115	1.877
#3	.6282	1087.	.1538	2.062	.0040	295.5	.2108	.2112	1.715

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	F2799.	364.0	10.79	30.40	5.438	-.0363	18.51	6.469	120.3
Stddev	6.	1.9	19.96	2.28	.027	.0121	6.03	.032	.2
%RSD	.2281	.5167	184.9	7.507	.4916	33.31	32.56	.4988	.1698
#1	2797.	361.9	-12.08	32.16	5.412	-.0302	19.85	6.488	120.2
#2	2794.	364.5	24.67	27.82	5.466	-.0503	23.75	6.487	120.2
#3	2806.	365.6	19.79	31.22	5.437	-.0285	11.92	6.431	120.6

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.5825	-.5443	5.135	8.114	1.957	4.430	.1064	.2195	F3270.
Stddev	.1706	.4778	.189	.086	.014	.012	.1638	.0662	1.
%RSD	29.28	87.78	3.676	1.060	.7323	.2670	154.0	30.16	.0362
#1	-.5226	-1.096	4.964	8.028	1.972	4.443	.2758	.1453	3272.
#2	-.4500	-.2638	5.338	8.200	1.944	4.427	.0945	.2726	3270.
#3	-.7750	-.2732	5.103	8.115	1.957	4.420	-.0512	.2404	3269.

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3032.0	6872.6	54787.	5236.9
Stddev	4.2	6.2	79.	79.7
%RSD	.13855	.09005	.14495	1.5212
#1	3034.1	6865.6	54836.	5243.7
#2	3027.2	6875.2	54830.	5154.0
#3	3034.7	6877.1	54696.	5312.9

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2016 12:11:56 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2513	41.12	2.063	2.041	1.974	41.00	2.039	2.043	2.053	2.000
Stddev	.0009	.11	.004	.002	.004	.14	.003	.002	.001	.004
%RSD	.3501	.2645	.1680	.0911	.2036	.3401	.1393	.1147	.0306	.2207
#1	.2518	41.18	2.060	2.042	1.978	41.15	2.038	2.043	2.053	2.001
#2	.2517	41.00	2.063	2.039	1.970	40.87	2.036	2.041	2.052	2.005
#3	.2502	41.19	2.067	2.043	1.975	40.98	2.042	2.045	2.053	1.996
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.88	40.59	40.05	2.030	2.054	41.42	2.077	1.975	2.059	2.065
Stddev	.05	.13	.18	.004	.005	.15	.002	.002	.002	.001
%RSD	.1165	.3099	.4524	.2050	.2403	.3532	.0949	.0788	.0999	.0700
#1	40.89	40.69	40.25	2.032	2.051	41.58	2.076	1.977	2.058	2.064
#2	40.92	40.45	39.90	2.033	2.053	41.29	2.075	1.974	2.062	2.064
#3	40.83	40.63	40.00	2.025	2.060	41.39	2.079	1.975	2.059	2.067
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.142	2.125	2.000	2.025	1.998	2.037	2.037
Stddev	.002	.003	.004	.005	.005	.003	.004
%RSD	.0713	.1525	.1956	.2582	.2671	.1215	.1780
#1	2.142	2.125	2.001	2.028	1.992	2.039	2.037
#2	2.141	2.123	1.996	2.027	2.001	2.038	2.033
#3	2.144	2.129	2.003	2.019	2.001	2.034	2.040
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2016 12:11:56 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2521.7	6409.0	50854.	5041.6
Stddev	5.0	18.3	164.	11.0
%RSD	.19922	.28583	.32288	.21834
#1	2521.4	6409.7	50904.	5029.3
#2	2526.8	6427.0	50670.	5050.6
#3	2516.8	6390.4	50987.	5044.9

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2016 12:15:53 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0102	.0003	.0003	.0004	.0118	.0003	.0002	.0004
Stddev	.0002	.0058	.0005	.0002	.0000	.0025	.0001	.0001	.0001
%RSD	53.06	56.97	153.9	81.62	4.625	21.68	35.72	45.11	14.31
#1	.0004	.0092	-.0002	.0002	.0004	.0088	.0004	.0003	.0004
#2	.0001	.0165	.0006	.0005	.0004	.0136	.0002	.0001	.0003
#3	.0005	.0049	.0005	.0001	.0004	.0128	.0002	.0002	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0007	.0256	.0801	.0130	.0004	F.0025	.0422	.0003	-.0006
Stddev	.0002	.0030	.0240	.0243	.0000	.0006	.0087	.0002	.0007
%RSD	26.39	11.75	29.95	186.9	11.23	26.40	20.71	85.04	102.1
#1	.0005	.0290	.1045	-.0025	.0004	.0031	.0333	.0005	-.0005
#2	.0007	.0245	.0792	.0410	.0003	.0025	.0426	.0001	-.0001
#3	.0009	.0233	.0565	.0004	.0003	.0018	.0507	.0003	-.0014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	-.0002	.0017	.0004	.0003	.0012	-.0002	.0003	.0002
Stddev	.0020	.0009	.0005	.0003	.0000	.0001	.0005	.0000	.0001
%RSD	15190.	367.2	26.66	66.60	18.72	10.84	250.9	12.51	21.50
#1	.0019	-.0012	.0020	.0008	.0003	.0013	-.0001	.0003	.0003
#2	.0002	.0000	.0020	.0003	.0002	.0013	-.0007	.0004	.0002
#3	-.0021	.0005	.0012	.0002	.0003	.0011	.0002	.0003	.0002
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2016 12:15:53 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3063.5	6829.3	55139.	5207.5
Stddev	4.7	4.8	105.	53.7
%RSD	.15241	.07028	.18972	1.0316
#1	3059.5	6823.9	55258.	5215.8
#2	3062.3	6831.2	55095.	5150.2
#3	3068.6	6832.9	55063.	5256.7

Zoom In Zoom Out

Sample Name: ICV Acquired: 5/17/2016 14:02:54 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2456	41.30	2.026	2.105	2.063	42.04	2.043	2.064	2.057	2.003
Stddev	.0009	.15	.004	.006	.005	.52	.002	.002	.006	.004
%RSD	.3580	.3750	.2103	.2659	.2266	1.240	.0916	.0704	.2751	.2218
#1	.2458	41.42	2.024	2.102	2.068	42.42	2.041	2.064	2.060	1.999
#2	.2447	41.35	2.023	2.101	2.059	42.26	2.044	2.063	2.050	2.003
#3	.2464	41.12	2.031	2.111	2.061	41.45	2.044	2.066	2.060	2.008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.51	41.82	41.92	2.087	1.907	42.58	2.080	2.019	2.044	2.072
Stddev	.49	.44	1.09	.006	.004	.18	.002	.002	.007	.006
%RSD	1.203	1.051	2.599	.3107	.2014	.4264	.1151	.1114	.3391	.3082
#1	40.83	42.14	42.64	2.091	1.903	42.74	2.078	2.016	2.037	2.067
#2	40.75	42.00	42.45	2.079	1.907	42.60	2.079	2.021	2.045	2.070
#3	39.95	41.32	40.66	2.089	1.911	42.38	2.083	2.019	2.051	2.079
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0759	2.057	1.951	1.944	2.100	1.900	2.064
Stddev	.0009	.004	.007	.005	.006	.004	.002
%RSD	1.129	.1802	.3646	.2438	.2687	.2226	.0929
#1	.0759	2.054	1.953	1.947	2.107	1.901	2.062
#2	.0767	2.056	1.943	1.938	2.098	1.896	2.066
#3	.0750	2.061	1.957	1.946	2.096	1.904	2.063
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: ICV Acquired: 5/17/2016 14:02:54 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2501.4	6344.7	50653.	5131.2
Stddev	8.1	13.7	193.	161.8
%RSD	.32184	.21606	.38198	3.1525
#1	2501.7	6348.4	50545.	5056.5
#2	2493.2	6329.5	50876.	5020.2
#3	2509.3	6356.1	50537.	5316.8

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2016 14:11:21 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2509	40.79	2.007	2.021	2.035	41.06	2.032	2.027	2.035	2.019
Stddev	.0003	.21	.001	.005	.012	.27	.003	.003	.009	.007
%RSD	.1283	.5121	.0441	.2596	.5861	.6510	.1646	.1487	.4331	.3504
#1	.2507	40.74	2.008	2.022	2.034	40.97	2.033	2.030	2.044	2.027
#2	.2507	40.61	2.007	2.015	2.024	40.85	2.028	2.024	2.027	2.016
#3	.2513	41.02	2.007	2.026	2.048	41.36	2.034	2.028	2.034	2.014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.76	40.89	41.09	2.056	2.022	41.24	2.029	1.988	2.010	2.015
Stddev	.12	.20	.34	.002	.003	.26	.004	.008	.002	.004
%RSD	.2956	.4909	.8360	.1160	.1675	.6291	.1778	.4210	.0975	.2004
#1	41.75	40.80	41.08	2.058	2.020	41.20	2.032	1.988	2.010	2.019
#2	41.65	40.75	40.76	2.053	2.020	41.00	2.025	1.980	2.008	2.017
#3	41.89	41.12	41.45	2.056	2.026	41.52	2.028	1.997	2.012	2.011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.085	2.047	2.056	2.052	2.013	2.034	2.029
Stddev	.001	.005	.012	.001	.010	.006	.006
%RSD	.0480	.2266	.5591	.0420	.4810	.2930	.3008
#1	2.086	2.051	2.053	2.053	2.013	2.041	2.035
#2	2.086	2.042	2.045	2.052	2.003	2.029	2.023
#3	2.084	2.046	2.068	2.051	2.022	2.033	2.030
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2016 14:11:21 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2501.2	6377.3	50374.	4984.6
Stddev	8.9	15.2	209.	65.0
%RSD	.35638	.23808	.41587	1.3030
#1	2499.3	6364.1	50233.	5004.1
#2	2510.9	6393.9	50614.	5037.6
#3	2493.4	6374.0	50273.	4912.1

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2016 14:18:03 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	-.0051	.0009	-.0003	-.0004	-.0065	.0000	.0000	-.0002
Stddev	.0002	.0057	.0005	.0002	.0001	.0010	.000	.000	.0003
%RSD	241.4	112.8	52.70	44.35	23.12	14.79	509.3	1727.	174.0
#1	.0002	.0010	.0003	-.0005	-.0004	-.0076	.0000	.0001	-.0001
#2	-.0001	-.0060	.0011	-.0002	-.0003	-.0057	.0000	.0000	-.0005
#3	.0000	-.0103	.0012	-.0004	-.0003	-.0062	-.0001	-.0001	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0005	-.0051	.0391	-.0224	-.0003	.0008	.0096	-.0001	F.0010
Stddev	.0002	.0043	.0173	.0114	.0000	.0003	.0030	.0001	.0003
%RSD	41.15	84.71	44.31	50.89	10.18	42.01	31.13	171.8	27.93
#1	-.0006	-.0096	.0256	-.0301	-.0003	.0011	.0071	.0000	.0012
#2	-.0003	-.0009	.0331	-.0278	-.0003	.0007	.0088	-.0002	.0011
#3	-.0006	-.0048	.0587	-.0093	-.0003	.0005	.0129	.0000	.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit									.0010
Low Limit									-.0010

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008	-.0009	-.0007	.0003	-.0004	.0000	-.0006	-.0003	.0000
Stddev	.0003	.0007	.0004	.0004	.0001	.0001	.0008	.0004	.000
%RSD	33.61	73.51	53.69	119.6	35.30	723.8	130.9	131.0	191.1
#1	.0005	-.0004	-.0003	.0008	-.0005	.0000	-.0005	.0001	.0000
#2	.0010	-.0017	-.0008	.0001	-.0002	.0001	-.0014	-.0004	.0000
#3	.0010	-.0007	-.0009	.0002	-.0004	-.0001	.0001	-.0006	-.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2016 14:18:03 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3026.3	6850.5	53929.	5124.2
Stddev	6.3	5.2	98.	24.3
%RSD	.20908	.07600	.18099	.47408
#1	3033.4	6848.3	53824.	5130.7
#2	3021.4	6846.8	53946.	5097.3
#3	3024.0	6856.5	54017.	5144.5

Zoom In Zoom Out

Sample Name: MP30364-MB1 Acquired: 5/17/2016 14:22:29 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0004	-.0141	-.0003	-.0009	-.0008	.0043	-.0004	-.0005	-.0004	.0000
Stddev	.0003	.0085	.0006	.0002	.0000	.0011	.0000	.0000	.0001	.000
%RSD	62.27	60.47	200.7	25.01	.6077	25.56	3.616	6.991	29.62	775.4
#1	-.0007	-.0065	-.0007	-.0011	-.0008	.0045	-.0004	-.0006	-.0004	.0002
#2	-.0002	-.0233	-.0004	-.0010	-.0008	.0031	-.0004	-.0005	-.0004	.0000
#3	-.0003	-.0125	.0003	-.0007	-.0008	.0053	-.0004	-.0005	-.0002	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0010	.0377	-.0282	-.0005	.0001	-.0115	-.0003	.0007	.0013	-.0011
Stddev	.0032	.0070	.0204	.0000	.0001	.0015	.0001	.0006	.0003	.0009
%RSD	322.4	18.62	72.41	4.761	71.40	13.02	32.36	94.71	19.69	78.91
#1	.0045	.0431	-.0054	-.0005	.0002	-.0122	-.0004	.0012	.0016	-.0003
#2	-.0015	.0403	-.0344	-.0006	.0001	-.0098	-.0004	.0009	.0012	-.0011
#3	-.0001	.0298	-.0447	-.0005	.0001	-.0126	-.0002	.0000	.0011	-.0020
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0108	.0219	-.0008	.0002	-.0024	-.0010	.0039
Stddev	.0010	.0003	.0000	.0003	.0004	.0001	.0000
%RSD	9.574	1.198	3.376	116.9	17.54	9.688	1.017
#1	.0113	.0216	-.0008	.0001	-.0023	-.0011	.0039
#2	.0096	.0220	-.0008	.0001	-.0028	-.0011	.0039
#3	.0115	.0221	-.0008	.0006	-.0020	-.0009	.0040
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP30364-MB1 Acquired: 5/17/2016 14:22:29 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2970.3	6750.4	53017.	5068.4
Stddev	2.5	24.1	306.	12.1
%RSD	.08373	.35627	.57736	.23952
#1	2972.3	6772.8	53033.	5054.4
#2	2967.5	6753.4	53314.	5074.9
#3	2971.0	6725.0	52703.	5075.9

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Zoom In Zoom Out

Sample Name: MP30364-B1 Acquired: 5/17/2016 14:26:39 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0483	27.42	1.983	2.123	.0529	26.19	.0516	.5191	.2095	.2663
Stddev	.0002	.10	.004	.007	.0001	.07	.0000	.0009	.0003	.0005
%RSD	.4786	.3669	.2243	.3219	.2586	.2790	.0497	.1811	.1534	.1719
#1	.0486	27.47	1.988	2.129	.0531	26.26	.0516	.5190	.2093	.2667
#2	.0483	27.48	1.983	2.125	.0529	26.20	.0516	.5201	.2098	.2664
#3	.0481	27.30	1.979	2.115	.0528	26.12	.0516	.5183	.2092	.2658
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	26.96	26.03	25.97	.5425	.4928	26.02	.5200	.5052	.4897	1.990
Stddev	.09	.07	.06	.0007	.0002	.13	.0004	.0028	.0037	.006
%RSD	.3188	.2725	.2393	.1233	.0375	.5083	.0739	.5622	.7605	.3071
#1	27.06	26.04	26.03	.5431	.4928	26.11	.5204	.5025	.4866	1.993
#2	26.89	26.09	25.91	.5417	.4930	26.09	.5200	.5050	.4888	1.993
#3	26.94	25.95	25.96	.5426	.4926	25.87	.5196	.5081	.4938	1.983
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0124	.5215	.5035	.5162	2.050	.4897	.5176
Stddev	.0011	.0009	.0013	.0006	.006	.0003	.0009
%RSD	9.249	.1752	.2663	.1224	.2813	.0632	.1709
#1	.0136	.5222	.5043	.5163	2.047	.4894	.5171
#2	.0121	.5219	.5042	.5156	2.047	.4899	.5186
#3	.0114	.5205	.5019	.5168	2.057	.4898	.5170
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP30364-B1 Acquired: 5/17/2016 14:26:39 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2610.8	6552.3	50377.	4919.4
Stddev	4.1	16.0	171.	32.4
%RSD	.15637	.24417	.33987	.65768
#1	2614.9	6549.7	50283.	4882.2
#2	2610.7	6537.8	50273.	4940.8
#3	2606.8	6569.5	50574.	4935.3

Zoom In Zoom Out

Sample Name: FA33973-1 Acquired: 5/17/2016 14:30:35 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	.0006	75.33	.0494	.7160	.0179	44.95	.0020	.0508
Stddev	.0001	.08	.0001	.0012	.0001	.03	.0001	.0001
%RSD	20.69	.1018	.1467	.1614	.6470	.0666	4.011	.1769
#1	.0007	75.41	.0494	.7174	.0180	44.98	.0021	.0507
#2	.0007	75.26	.0494	.7153	.0178	44.93	.0019	.0507
#3	.0005	75.33	.0495	.7155	.0178	44.93	.0019	.0509

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	.0833	.1329	153.4	25.47	21.40	2.793	.0054	.4949
Stddev	.0001	.0002	.9	.02	.03	.012	.0001	.0035
%RSD	.0978	.1677	.6012	.0888	.1376	.4187	1.500	.7094
#1	.0833	.1328	152.4	25.49	21.42	2.806	.0055	.4990
#2	.0833	.1331	154.2	25.46	21.36	2.782	.0055	.4928
#3	.0832	.1327	153.7	25.45	21.40	2.790	.0053	.4931

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.0819	.3761	-.0025	-.0049	1.358	.0133	.2333	2.589
Stddev	.0001	.0009	.0004	.0005	.001	.0002	.0006	.006
%RSD	.0850	.2511	14.16	11.25	.0609	1.540	.2739	.2162
#1	.0818	.3755	-.0026	-.0043	1.359	.0135	.2340	2.592
#2	.0819	.3756	-.0022	-.0050	1.358	.0134	.2330	2.593
#3	.0819	.3772	-.0029	-.0053	1.357	.0131	.2327	2.583

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	F-.0172	.1653	.5133
Stddev	.0005	.0000	.0005
%RSD	2.997	.0267	.0943
#1	-.0167	.1653	.5131
#2	-.0171	.1652	.5129
#3	-.0177	.1652	.5138

Zoom In Zoom Out

Sample Name: FA33973-1 Acquired: 5/17/2016 14:30:35 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2584.6	16897.	126570.	12966.
Stddev	3.5	7.	474.	96.
%RSD	.13372	.03907	.37453	.73945
#1	2588.6	16890.	126030.	13076.
#2	2583.1	16904.	126900.	12898.
#3	2582.2	16898.	126780.	12926.

Zoom In Zoom Out

Sample Name: MP30364-D1 Acquired: 5/17/2016 14:34:58 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	.0006	65.89	.0443	.6046	.0163	37.80	.0014	.0461
Stddev	.0001	.09	.0001	.0007	.0001	.08	.0003	.0000
%RSD	21.07	.1419	.2757	.1083	.4725	.2062	18.36	.0785
#1	.0006	65.97	.0441	.6042	.0164	37.86	.0012	.0461
#2	.0004	65.92	.0443	.6054	.0162	37.82	.0017	.0462
#3	.0007	65.79	.0444	.6043	.0163	37.71	.0013	.0462

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	.0735	.1098	146.9	23.14	20.50	2.342	.0050	.3754
Stddev	.0002	.0003	2.3	.01	.08	.018	.0001	.0031
%RSD	.3015	.2645	1.547	.0359	.3698	.7535	1.226	.8386
#1	.0736	.1101	148.3	23.14	20.56	2.322	.0050	.3790
#2	.0737	.1096	144.3	23.14	20.53	2.355	.0049	.3734
#3	.0733	.1096	148.1	23.13	20.42	2.350	.0050	.3737

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.0769	.3033	-.0031	-.0044	1.364	.0128	.1955	2.444
Stddev	.0002	.0002	.0003	.0001	.002	.0000	.0003	.011
%RSD	.2865	.0747	8.372	1.280	.1243	.2999	.1600	.4565
#1	.0768	.3035	-.0034	-.0043	1.362	.0128	.1957	2.431
#2	.0767	.3034	-.0031	-.0044	1.366	.0129	.1956	2.452
#3	.0771	.3031	-.0029	-.0045	1.363	.0129	.1951	2.448

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	F-.0154	.1441	.4459
Stddev	.0006	.0004	.0003
%RSD	4.224	.2972	.0701
#1	-.0158	.1436	.4457
#2	-.0146	.1445	.4458
#3	-.0156	.1440	.4463

Zoom In Zoom Out

Sample Name: MP30364-D1 Acquired: 5/17/2016 14:34:58 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2579.9	16092.	119760.	12232.
Stddev	.8	13.	398.	39.
%RSD	.03040	.07826	.33220	.32105
#1	2579.6	16078.	119980.	12194.
#2	2580.8	16103.	119300.	12229.
#3	2579.3	16095.	120000.	12273.

Zoom In Zoom Out

Sample Name: MP30364-SD1 Acquired: 5/17/2016 14:39:16 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0002	151.5	.1044	1.459	.0345	92.55	.0019	.1089	.1692	.2707
Stddev	.0012	.2	.0022	.000	.0003	.03	.0003	.0002	.0017	.0021
%RSD	574.3	.1120	2.085	.0220	.7636	.0295	16.80	.1820	1.000	.7878
#1	-.0001	151.4	.1019	1.459	.0342	92.53	.0017	.1091	.1690	.2708
#2	.0016	151.7	.1051	1.459	.0347	92.58	.0023	.1087	.1710	.2685
#3	-.0008	151.4	.1061	1.459	.0345	92.54	.0018	.1089	.1676	.2728

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	340.3	52.33	45.03	5.994	.0089	1.033	.1720	.4006	-.0086	-.0110
Stddev	.6	.17	.06	.006	.0003	.030	.0000	.0013	.0017	.0006
%RSD	.1712	.3208	.1360	.0951	3.148	2.877	.0217	.3121	19.70	5.810
#1	340.7	52.50	45.02	5.994	.0086	1.009	.1720	.4002	-.0089	-.0108
#2	339.6	52.31	45.09	6.000	.0090	1.066	.1720	.3995	-.0102	-.0117
#3	340.5	52.17	44.97	5.988	.0092	1.025	.1719	.4020	-.0068	-.0105

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.842	.0275	.4767	5.401	-.0093	.3333	1.121
Stddev	.005	.0003	.0002	.004	.0030	.0007	.002
%RSD	.1686	1.042	.0464	.0685	32.80	.2214	.1559
#1	2.845	.0274	.4769	5.403	-.0060	.3325	1.122
#2	2.844	.0272	.4766	5.403	-.0120	.3336	1.121
#3	2.836	.0278	.4765	5.397	-.0098	.3339	1.119

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2784.4	9135.3	69065.	6685.4
Stddev	7.3	10.1	95.	41.8
%RSD	.26045	.11064	.13741	.62511
#1	2790.0	9146.8	69074.	6652.8
#2	2787.0	9131.2	69155.	6670.8
#3	2776.2	9127.9	68966.	6732.5

Zoom In Zoom Out

Sample Name: MP30364-PS1 Acquired: 5/17/2016 14:43:20 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0191	76.08	.0873	.8209	.0384	46.65	.0206	.0694	.1029	.1759
Stddev	.0002	.22	.0003	.0023	.0002	.15	.0002	.0000	.0002	.0004
%RSD	1.022	.2889	.3475	.2847	.5669	.3259	.7595	.0570	.1634	.2053
#1	.0190	76.28	.0875	.8229	.0386	46.78	.0208	.0695	.1029	.1755
#2	.0193	75.85	.0875	.8184	.0382	46.48	.0205	.0694	.1030	.1761
#3	.0191	76.12	.0870	.8214	.0385	46.68	.0206	.0694	.1027	.1761

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	156.3	29.50	23.31	2.799	.0421	4.526	.1179	.4199	.0359	.0319
Stddev	1.5	.09	.03	.006	.0001	.021	.0001	.0002	.0005	.0010
%RSD	.9575	.3146	.1279	.2123	.3358	.4687	.0796	.0466	1.520	3.180
#1	154.6	29.60	23.32	2.800	.0422	4.545	.1178	.4201	.0357	.0307
#2	157.5	29.43	23.27	2.793	.0422	4.503	.1180	.4198	.0365	.0325
#3	156.7	29.46	23.32	2.804	.0419	4.530	.1179	.4197	.0355	.0325

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.354	.0302	.2546	2.635	.0746	.1837	.6084
Stddev	.001	.0001	.0009	.009	.0007	.0002	.0002
%RSD	.0708	.4523	.3512	.3425	.9472	.1139	.0362
#1	1.354	.0301	.2555	2.646	.0737	.1840	.6087
#2	1.354	.0303	.2537	2.628	.0750	.1836	.6082
#3	1.355	.0301	.2546	2.632	.0749	.1836	.6084

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2547.6	16655.	123430.	12574.
Stddev	5.5	7.	334.	33.
%RSD	.21657	.04495	.27059	.26447
#1	2541.7	16647.	123150.	12549.
#2	2552.7	16655.	123350.	12562.
#3	2548.4	16662.	123800.	12612.

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: MP30364-S1 Acquired: 5/17/2016 14:47:42 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0196	92.77	.7485	1.519	.0386	51.03	.0199	.2340	.1598	.2367
Stddev	.0003	1.72	.0011	.004	.0001	.07	.0004	.0002	.0002	.0007
%RSD	1.299	1.849	.1534	.2415	.1709	.1438	2.045	.0707	.1330	.2762
#1	.0195	92.71	.7485	1.516	.0387	50.99	.0200	.2338	.1599	.2365
#2	.0195	91.08	.7496	1.518	.0386	50.98	.0203	.2341	.1599	.2361
#3	.0199	94.51	.7473	1.523	.0387	51.11	.0195	.2341	.1596	.2374

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	161.7	35.66	31.33	3.005	.1545	10.07	.2593	.8724	.0544	.6894
Stddev	4.0	.07	.11	.014	.0000	.01	.0001	.0042	.0009	.0009
%RSD	2.488	.2065	.3622	.4571	.0293	.0843	.0521	.4824	1.723	.1297
#1	161.9	35.66	31.27	3.021	.1545	10.06	.2594	.8700	.0535	.6885
#2	157.6	35.59	31.25	2.998	.1544	10.07	.2594	.8772	.0553	.6903
#3	165.7	35.74	31.46	2.996	.1545	10.08	.2591	.8699	.0545	.6893

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.484	.1712	.4270	2.964	1.843	.3430	.6839
Stddev	.001	.0004	.0010	.014	.007	.0004	.0005
%RSD	.0647	.2380	.2420	.4616	.3629	.1183	.0791
#1	1.484	.1715	.4260	2.953	1.836	.3434	.6838
#2	1.484	.1714	.4268	2.960	1.846	.3428	.6845
#3	1.483	.1708	.4281	2.980	1.848	.3427	.6835

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2494.1	17450.	128040.	13327.
Stddev	9.8	15.	195.	146.
%RSD	.39120	.08446	.15204	1.0918
#1	2503.6	17445.	127890.	13254.
#2	2484.1	17438.	127970.	13494.
#3	2494.5	17467.	128260.	13233.

Zoom In Zoom Out

Sample Name: MP30364-S2 Acquired: 5/17/2016 14:52:10 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0206	94.60	.7939	1.575	.0396	52.92	.0207	.2393	.1586	.2387
Stddev	.0001	.46	.0006	.005	.0002	.28	.0004	.0001	.0004	.0003
%RSD	.5334	.4868	.0791	.2895	.5065	.5262	1.714	.0358	.2565	.1436
#1	.0207	94.66	.7934	1.577	.0396	52.95	.0207	.2394	.1584	.2384
#2	.0205	95.02	.7946	1.577	.0398	53.18	.0203	.2392	.1584	.2387
#3	.0205	94.11	.7937	1.569	.0395	52.63	.0210	.2393	.1591	.2391

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	168.6	35.89	32.46	2.971	.1654	10.70	.2656	.8529	.0587	.7299
Stddev	3.4	.15	.08	.008	.0001	.07	.0005	.0021	.0004	.0003
%RSD	2.030	.4147	.2359	.2679	.0381	.6991	.1710	.2493	.7436	.0380
#1	167.4	35.94	32.50	2.964	.1655	10.73	.2655	.8535	.0587	.7296
#2	172.4	36.00	32.51	2.969	.1654	10.76	.2660	.8547	.0583	.7301
#3	165.9	35.72	32.38	2.979	.1654	10.62	.2651	.8506	.0592	.7300

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.468	.1817	.4448	2.975	1.840	.3496	.7099
Stddev	.001	.0004	.0015	.014	.004	.0003	.0003
%RSD	.0980	.2024	.3393	.4691	.2066	.0858	.0433
#1	1.469	.1819	.4444	2.987	1.836	.3499	.7103
#2	1.468	.1819	.4464	2.959	1.843	.3493	.7098
#3	1.466	.1812	.4435	2.978	1.841	.3496	.7097

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2486.5	16294.	119830.	12224.
Stddev	3.0	30.	62.	71.
%RSD	.12119	.18426	.05149	.57735
#1	2483.3	16261.	119880.	12243.
#2	2487.1	16319.	119760.	12146.
#3	2489.2	16303.	119850.	12283.

Zoom In Zoom Out

Sample Name: FA33973-2 Acquired: 5/17/2016 14:56:33 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	.0013	67.75	.1484	.8171	.0146	220.2	.0096	.0708
Stddev	.0000	.14	.0004	.0016	.0001	1.7	.0002	.0002
%RSD	.7673	.2060	.2588	.1905	.7080	.7500	1.728	.2319
#1	.0013	67.81	.1486	.8174	.0147	221.6	.0095	.0709
#2	.0013	67.59	.1479	.8154	.0145	220.6	.0095	.0708
#3	.0013	67.85	.1485	.8185	.0146	218.4	.0098	.0706

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	.1059	.2726	154.0	28.20	29.90	F4.858	.0151	.9409
Stddev	.0006	.0006	1.3	.08	.13	.024	.0000	.0050
%RSD	.5565	.2298	.8620	.2783	.4282	.4911	.2072	.5290
#1	.1052	.2733	154.8	28.27	30.04	4.858	.0151	.9352
#2	.1064	.2724	154.7	28.11	29.80	4.834	.0151	.9428
#3	.1059	.2721	152.5	28.21	29.86	4.881	.0152	.9446

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.1111	.8422	-.0025	-.0040	1.044	.0159	.2879	3.145
Stddev	.0003	.0024	.0007	.0005	.000	.0001	.0007	.024
%RSD	.2867	.2804	27.46	13.27	.0395	.5814	.2547	.7557
#1	.1114	.8398	-.0022	-.0043	1.044	.0160	.2883	3.118
#2	.1112	.8445	-.0033	-.0042	1.044	.0159	.2870	3.152
#3	.1108	.8423	-.0021	-.0034	1.043	.0159	.2883	3.164

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	F-.0184	.1903	2.437
Stddev	.0012	.0002	.006
%RSD	6.772	.1050	.2517
#1	-.0198	.1901	2.441
#2	-.0175	.1904	2.441
#3	-.0179	.1905	2.430

Zoom In Zoom Out

Sample Name: FA33973-2 Acquired: 5/17/2016 14:56:33 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2373.1	19225.	140580.	14859.
Stddev	5.5	29.	676.	92.
%RSD	.23107	.14914	.48090	.62191
#1	2376.7	19201.	141360.	14752.
#2	2366.8	19216.	140230.	14913.
#3	2375.9	19256.	140160.	14911.

Zoom In Zoom Out

Sample Name: FA33987-1 Acquired: 5/17/2016 15:01:06 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0003	37.22	.0059	.0694	-.0002	48.24	-.0003	.0001	.0400	.0153
Stddev	.0003	.12	.0003	.0004	.0001	.20	.0000	.0001	.0003	.0002
%RSD	102.1	.3183	4.670	.5050	40.33	.4248	13.54	99.49	.7557	1.611
#1	-.0002	37.33	.0062	.0696	-.0003	48.46	-.0003	.0001	.0403	.0155
#2	-.0007	37.10	.0057	.0690	-.0001	48.06	-.0004	.0001	.0401	.0154
#3	-.0001	37.24	.0058	.0696	-.0003	48.21	-.0003	.0000	.0397	.0151

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	5.053	.5595	.8742	.0297	.0008	.1502	.0078	.0404	.0001	.0022
Stddev	.027	.0202	.0118	.0002	.0001	.0040	.0002	.0007	.0005	.0015
%RSD	.5368	3.618	1.354	.5058	6.163	2.681	1.967	1.776	390.9	68.46
#1	5.082	.5584	.8610	.0298	.0008	.1526	.0076	.0405	.0006	.0038
#2	5.028	.5398	.8840	.0296	.0009	.1456	.0079	.0397	-.0002	.0008
#3	5.051	.5803	.8776	.0296	.0008	.1524	.0079	.0411	-.0001	.0020

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.042	.0165	.1790	.2274	-.0018	.0231	.0234
Stddev	.002	.0001	.0004	.0005	.0004	.0001	.0001
%RSD	.1060	.6786	.2492	.2042	23.63	.3508	.3359
#1	2.040	.0164	.1789	.2279	-.0022	.0231	.0235
#2	2.040	.0166	.1786	.2272	-.0014	.0231	.0234
#3	2.044	.0166	.1795	.2270	-.0017	.0230	.0235

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2750.0	6969.4	51900.	4962.1
Stddev	3.6	11.2	243.	61.7
%RSD	.13091	.16029	.46832	1.2432
#1	2750.5	6976.6	51638.	4898.4
#2	2753.2	6975.0	52119.	5021.5
#3	2746.1	6956.5	51942.	4966.3

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2016 15:05:09 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2541	39.86	1.923	2.031	2.063	39.81	2.035	2.022	1.994	2.075
Stddev	.0010	.05	.005	.002	.007	.05	.005	.004	.005	.009
%RSD	.3854	.1232	.2497	.1135	.3223	.1338	.2499	.2114	.2520	.4484
#1	.2541	39.86	1.918	2.034	2.071	39.86	2.030	2.017	1.991	2.067
#2	.2550	39.92	1.923	2.030	2.061	39.81	2.037	2.023	2.000	2.085
#3	.2531	39.82	1.928	2.029	2.058	39.76	2.040	2.025	1.991	2.072
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	42.70	41.56	40.73	2.105	1.991	40.46	1.966	2.045	1.949	1.942
Stddev	.07	.13	.15	.002	.008	.14	.003	.004	.001	.005
%RSD	.1678	.3059	.3702	.0826	.3915	.3493	.1401	.2130	.0699	.2644
#1	42.75	41.69	40.83	2.106	1.982	40.56	1.964	2.045	1.951	1.937
#2	42.61	41.55	40.79	2.106	1.992	40.52	1.965	2.041	1.949	1.943
#3	42.73	41.43	40.55	2.103	1.998	40.30	1.969	2.050	1.948	1.947
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.018	1.926	2.126	2.132	2.066	2.034	2.019
Stddev	.003	.003	.007	.000	.007	.005	.006
%RSD	.1504	.1421	.3415	.0043	.3559	.2291	.3109
#1	2.014	1.925	2.133	2.132	2.069	2.031	2.012
#2	2.018	1.925	2.126	2.132	2.057	2.039	2.021
#3	2.020	1.930	2.118	2.132	2.070	2.032	2.024
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2016 15:05:09 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2520.4	6638.7	49708.	4880.1
Stddev	3.2	14.0	94.	17.2
%RSD	.12616	.21074	.18875	.35212
#1	2520.2	6653.9	49728.	4860.2
#2	2523.6	6635.9	49606.	4890.5
#3	2517.2	6626.3	49790.	4889.5

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2016 15:09:06 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	-.0060	.0009	-.0001	-.0002	.0005	.0000	.0000	-.0003
Stddev	.0002	.0039	.0003	.0001	.0001	.0033	.000	.0001	.0001
%RSD	90.05	64.49	37.54	116.6	60.07	623.9	209.3	942.4	43.80
#1	-.0001	-.0042	.0012	-.0002	-.0003	-.0033	.0000	.0001	-.0001
#2	-.0001	-.0104	.0006	-.0001	-.0001	.0026	.0000	.0001	-.0004
#3	-.0005	-.0034	.0007	.0000	-.0002	.0023	-.0001	-.0001	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0009	.0180	.1337	-.0237	-.0001	F.0022	-.0066	-.0001	F.0010
Stddev	.0002	.0013	.0156	.0096	.0001	.0007	.0077	.0001	.0005
%RSD	20.46	7.462	11.70	40.58	79.12	29.98	117.0	138.2	45.32
#1	-.0007	.0165	.1202	-.0167	.0000	.0028	-.0003	.0000	.0010
#2	-.0010	.0187	.1508	-.0197	-.0001	.0022	-.0042	-.0001	.0006
#3	-.0010	.0190	.1300	-.0346	-.0002	.0015	-.0151	-.0003	.0015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail
High Limit						.0010			.0010
Low Limit						-.0010			-.0010

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008	-.0003	-.0004	.0004	-.0001	.0010	.0004	-.0003	.0000
Stddev	.0018	.0015	.0003	.0002	.0002	.0002	.0008	.0003	.000
%RSD	216.6	447.2	77.25	66.07	132.0	17.72	199.8	93.80	682.4
#1	.0029	-.0013	-.0007	.0006	-.0004	.0011	-.0002	-.0004	.0001
#2	.0000	-.0012	-.0005	.0004	-.0001	.0010	.0001	-.0005	.0000
#3	-.0005	.0014	-.0001	.0001	.0000	.0008	.0013	.0000	-.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2016 15:09:06 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3077.9	7144.3	53712.	4924.7
Stddev	.4	15.3	196.	6.2
%RSD	.01164	.21425	.36444	.12611
#1	3078.3	7159.2	53797.	4930.5
#2	3077.9	7145.0	53488.	4918.1
#3	3077.6	7128.6	53851.	4925.3

Zoom In Zoom Out

Sample Name: FA33931-5 Acquired: 5/17/2016 15:13:16 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 500.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.1389	776.2	.5544	1.729	-.3259	222.6	-.0005	.0961	.9866
Stddev	.1699	12.2	.2247	.040	.0509	.5	.0093	.0238	.0890
%RSD	122.3	1.573	40.54	2.334	15.62	.2207	1782.	24.76	9.022
#1	.2414	762.5	.5127	1.746	-.2884	222.2	.0017	.0983	.9946
#2	.2325	786.1	.3535	1.758	-.3054	223.1	.0075	.0713	1.071
#3	-.0572	779.9	.7971	1.683	-.3838	222.3	-.0108	.1187	.8939

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	F3247.	316.0	28.52	18.29	3.836	.2945	4.857	5.574	133.0
Stddev	1.	1.9	17.71	10.88	.039	.0602	4.841	.005	.2
%RSD	.0445	.5938	62.10	59.45	1.011	20.44	99.67	.0847	.1271
#1	3249.	318.1	35.31	21.55	3.831	.3638	6.856	5.579	133.0
#2	3247.	315.5	8.417	6.163	3.800	.2644	-.6630	5.571	132.8
#3	3246.	314.4	41.83	27.17	3.877	.2553	8.380	5.571	133.2

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.3232	-.9176	2.609	7.126	1.306	4.786	-.2126	-.0876	F3483.
Stddev	.1695	.1378	.153	.046	.014	.029	.0972	.0109	1.
%RSD	52.43	15.01	5.874	.6455	1.047	.6128	45.73	12.46	.0374
#1	.4004	-1.016	2.766	7.073	1.316	4.776	-.1102	-.0938	3483.
#2	.1289	-.9765	2.600	7.154	1.290	4.819	-.3037	-.0941	3483.
#3	.4402	-.7601	2.460	7.152	1.310	4.763	-.2238	-.0750	3481.

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3043.1	7128.5	53610.	5032.0
Stddev	2.7	2.2	200.	45.0
%RSD	.09026	.03017	.37277	.89389
#1	3041.0	7126.1	53797.	5083.2
#2	3046.2	7130.3	53633.	4998.8
#3	3042.1	7129.2	53400.	5014.0

Zoom In Zoom Out

Sample Name: FA33931-6 Acquired: 5/17/2016 15:17:24 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 500.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.1682	1644.	.3024	2.892	-.3653	265.9	.0235	.0792	1.745
Stddev	.0956	15.	.0809	.059	.0355	1.5	.0173	.0228	.052
%RSD	56.82	.9326	26.74	2.052	9.708	.5809	73.77	28.82	2.962
#1	.0688	1661.	.3717	2.927	-.4058	267.5	.0380	.1042	1.694
#2	.1764	1632.	.3221	2.823	-.3401	265.7	.0283	.0739	1.797
#3	.2595	1640.	.2136	2.925	-.3499	264.4	.0043	.0595	1.744

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	F3279.	407.2	26.10	16.28	6.094	.1876	-7.864	7.632	145.2
Stddev	4.	3.8	6.99	9.73	.030	.0364	1.887	.012	.5
%RSD	.1074	.9343	26.79	59.72	.4858	19.41	24.00	.1504	.3753
#1	3275.	411.0	33.24	8.112	6.074	.1475	-9.758	7.619	144.8
#2	3281.	403.4	25.78	13.70	6.079	.2186	-5.983	7.636	145.0
#3	3281.	407.1	19.27	27.04	6.128	.1967	-7.851	7.640	145.8

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.1701	-.2220	3.193	8.704	1.974	5.675	-.0956	-.0863	F3771.
Stddev	.1992	.3797	.704	.070	.042	.018	.1343	.0602	4.
%RSD	117.1	171.0	22.04	.8055	2.131	.3228	140.6	69.70	.1024
#1	-.2099	-.1848	4.005	8.682	2.023	5.655	-.1985	-.0975	3769.
#2	-.3464	.1377	2.781	8.782	1.946	5.692	.0564	-.0214	3769.
#3	.0459	-.6189	2.792	8.647	1.954	5.677	-.1445	-.1402	3775.

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2967.4	6997.1	52621.	4932.2
Stddev	9.2	6.6	99.	54.7
%RSD	.30892	.09446	.18885	1.1092
#1	2971.1	7001.8	52676.	4873.8
#2	2974.2	7000.0	52681.	4982.3
#3	2957.0	6989.6	52506.	4940.3

Zoom In Zoom Out

Sample Name: FA33931-7 Acquired: 5/17/2016 15:21:31 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 500.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0504	1275.	.2522	1.558	-.4438	263.5	.0035	.0043	.9808
Stddev	.0509	2.	.3853	.124	.0413	3.8	.0116	.0267	.0935
%RSD	100.8	.1932	152.8	7.984	9.296	1.424	332.8	622.6	9.537
#1	.0060	1277.	-.1323	1.524	-.4362	261.7	.0153	-.0263	.9847
#2	-.0647	1277.	.6384	1.454	-.4069	261.0	-.0080	.0230	1.072
#3	-.0926	1273.	.2506	1.695	-.4883	267.8	.0033	.0162	.8854

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	F2734.	338.3	19.34	10.20	4.745	.0167	-10.50	5.158	100.1
Stddev	7.	2.5	7.22	6.48	.027	.0951	4.83	.136	.4
%RSD	.2650	.7505	37.32	63.50	.5710	568.7	46.02	2.634	.3822
#1	2740.	336.6	25.38	17.36	4.776	.1257	-12.98	5.116	99.66
#2	2726.	341.2	21.29	8.509	4.726	-.0264	-13.58	5.309	100.1
#3	2736.	337.0	11.35	4.741	4.733	-.0492	-4.931	5.048	100.4

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.3276	-.6941	3.068	6.665	1.182	10.42	-.3142	-.0882	F2695.
Stddev	.6586	.4209	.470	.144	.042	.07	.2451	.0409	7.
%RSD	201.0	60.64	15.32	2.155	3.567	.6843	78.00	46.31	.2745
#1	-.8906	-1.179	3.586	6.825	1.200	10.49	-.4672	-.1035	2693.
#2	.3967	-.4842	2.670	6.546	1.134	10.35	-.4438	-.0419	2689.
#3	-.4889	-.4194	2.947	6.625	1.212	10.41	-.0315	-.1193	2703.

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3002.8	7079.2	52850.	4936.0
Stddev	12.8	14.9	226.	20.7
%RSD	.42722	.21063	.42732	.41853
#1	3006.6	7081.7	52604.	4922.9
#2	3013.3	7092.8	53048.	4959.8
#3	2988.5	7063.2	52898.	4925.3

Zoom In Zoom Out

Sample Name: FA33931-8 Acquired: 5/17/2016 15:25:38 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 500.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.1190	1311.	.3106	3.093	-.4226	442.7	.0408	.0479	1.551
Stddev	.1122	2.	.2500	.066	.0132	2.0	.0015	.0154	.111
%RSD	94.25	.1403	80.47	2.143	3.127	.4446	3.671	32.11	7.124
#1	.0039	1309.	.4136	3.017	-.4147	440.4	.0423	.0356	1.459
#2	.2279	1313.	.0256	3.126	-.4153	443.8	.0408	.0429	1.521
#3	.1252	1311.	.4928	3.136	-.4378	443.8	.0393	.0651	1.673

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	F2780.	356.8	8.291	32.40	6.317	-.0229	8.680	5.767	129.6
Stddev	1.	.9	13.50	10.20	.014	.0367	5.563	.079	.4
%RSD	.0404	.2536	162.8	31.49	.2282	159.9	64.09	1.362	.2927
#1	2780.	357.8	14.94	26.12	6.307	.0194	11.94	5.683	129.3
#2	2779.	356.4	-7.242	44.17	6.310	-.0438	11.84	5.777	130.0
#3	2781.	356.1	17.18	26.90	6.333	-.0444	2.257	5.840	129.4

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0703	-.4447	3.576	6.881	2.494	4.601	-.2411	-.0086	F3498.
Stddev	.3739	.7067	.484	.191	.039	.003	.1901	.0646	3.
%RSD	532.1	158.9	13.53	2.780	1.556	.0670	78.86	753.2	.0909
#1	.3338	-1.256	4.096	6.882	2.516	4.598	-.0216	.0454	3495.
#2	-.4041	.0402	3.138	7.071	2.516	4.602	-.3560	.0091	3501.
#3	-.1405	-.1188	3.494	6.689	2.449	4.604	-.3457	-.0802	3499.

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3025.9	7155.8	53160.	4967.8
Stddev	1.6	1.7	319.	34.0
%RSD	.05437	.02437	.59962	.68363
#1	3026.3	7157.6	53226.	5006.5
#2	3024.1	7154.1	53441.	4954.1
#3	3027.4	7155.8	52814.	4942.9

Zoom In Zoom Out

Sample Name: FA33931-9 Acquired: 5/17/2016 15:29:44 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 500.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0800	1073.	.1585	2.055	-.4185	331.4	-.0144	.0361	1.030
Stddev	.2034	15.	.3197	.115	.0829	3.6	.0244	.0511	.130
%RSD	254.2	1.441	201.7	5.615	19.80	1.082	169.0	141.6	12.64
#1	.0469	1086.	.1174	2.115	-.5067	335.0	-.0372	.0315	1.178
#2	-.1048	1056.	-.1387	2.129	-.4068	327.8	-.0175	.0892	.9328
#3	.2979	1077.	.4968	1.922	-.3422	331.5	.0113	-.0126	.9793

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	F2660.	320.9	12.80	23.29	5.886	-.0515	.3951	5.326	126.2
Stddev	5.	3.7	3.07	9.20	.017	.0227	3.541	.049	.6
%RSD	.2044	1.156	24.00	39.48	.2943	44.13	896.2	.9167	.4376
#1	2663.	319.9	9.811	14.22	5.892	-.0298	-3.633	5.333	126.8
#2	2654.	325.1	15.95	23.04	5.866	-.0495	1.801	5.275	125.8
#3	2663.	317.9	12.64	32.61	5.899	-.0751	3.018	5.372	125.9

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.4247	-.4400	3.494	5.915	1.737	3.129	-.3021	-.2983	F3379.
Stddev	.3389	.3461	.374	.094	.024	.059	.2628	.1145	5.
%RSD	79.79	78.66	10.70	1.590	1.363	1.903	86.99	38.39	.1472
#1	-.8150	-.5368	3.870	5.858	1.750	3.106	-.0658	-.2210	3381.
#2	-.2529	-.0558	3.123	6.024	1.752	3.197	-.2553	-.2440	3373.
#3	-.2061	-.7275	3.488	5.864	1.710	3.085	-.5851	-.4298	3382.

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2987.5	7046.1	52331.	4882.0
Stddev	5.7	11.5	176.	38.6
%RSD	.19171	.16263	.33589	.79052
#1	2982.9	7049.5	52359.	4844.5
#2	2993.9	7055.5	52143.	4921.6
#3	2985.6	7033.4	52491.	4879.9

Zoom In Zoom Out

Sample Name: FA33931-10 Acquired: 5/17/2016 15:33:52 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 250.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0753	1041.	-.0988	2.150	-.2102	165.1	-.0319	.0696	53.15
Stddev	.1124	4.	.0621	.003	.0105	1.3	.0092	.0103	.07
%RSD	149.3	.3554	62.78	.1544	5.001	.7816	28.95	14.79	.1369
#1	.0512	1045.	-.1417	2.147	-.1999	166.6	-.0411	.0578	53.23
#2	-.1132	1041.	-.0277	2.153	-.2209	164.1	-.0320	.0765	53.13
#3	-.1639	1038.	-.1271	2.151	-.2097	164.8	-.0226	.0746	53.08

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	551.5	333.9	8.983	14.97	9.819	.1104	-2.513	3.546	49.64
Stddev	1.2	.2	5.464	1.42	.029	.0189	1.618	.008	.09
%RSD	.2094	.0621	60.83	9.476	.2984	17.17	64.38	.2285	.1786
#1	552.5	334.2	8.137	14.70	9.840	.1106	-4.073	3.552	49.74
#2	551.7	333.9	14.82	13.71	9.785	.0913	-2.622	3.537	49.61
#3	550.3	333.8	3.992	16.51	9.831	.1292	-.8435	3.550	49.57

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.2018	-.2634	6.207	5.014	.3527	4.523	-.2189	.3261	F1281.
Stddev	.0481	.2685	1.131	.052	.0132	.045	.2663	.0452	1.
%RSD	23.84	101.9	18.22	1.029	3.748	1.003	121.7	13.87	.0718
#1	-.1546	-.5711	7.341	5.048	.3620	4.498	-.4506	.3413	1281.
#2	-.2002	-.1428	6.200	4.955	.3585	4.497	-.2779	.2752	1281.
#3	-.2508	-.0765	5.079	5.040	.3375	4.576	.0720	.3616	1280.

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2969.7	7044.9	52209.	4878.7
Stddev	5.2	2.3	145.	36.9
%RSD	.17649	.03293	.27818	.75628
#1	2963.7	7045.2	52061.	4841.7
#2	2972.9	7047.1	52215.	4915.5
#3	2972.6	7042.5	52352.	4878.8

Zoom In Zoom Out

Sample Name: FA33931-11 Acquired: 5/17/2016 15:37:59 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 250.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0585	754.2	.0209	2.510	-.2300	172.4	-.0458	.0574	57.36	724.7
Stddev	.0562	4.1	.0572	.021	.0292	.9	.0034	.0143	.20	2.4
%RSD	96.07	.5439	273.7	.8388	12.70	.4980	7.486	24.86	.3448	.3355
#1	-.1209	758.9	-.0052	2.515	-.1963	172.2	-.0452	.0702	57.28	723.9
#2	-.0118	752.6	-.0186	2.529	-.2451	173.4	-.0495	.0420	57.21	722.7
#3	-.0429	751.1	.0865	2.487	-.2485	171.7	-.0427	.0600	57.58	727.4

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	363.8	8.696	11.01	8.851	.1451	.9533	3.766	54.36	-.0905	-.2238
Stddev	.7	3.472	2.03	.004	.0183	1.369	.028	.13	.2356	.1996
%RSD	.1856	39.93	18.47	.0466	12.62	143.7	.7359	.2320	260.5	89.19
#1	363.0	5.849	12.17	8.846	.1643	.2039	3.752	54.48	-.0110	-.4036
#2	364.2	7.676	12.20	8.854	.1278	2.534	3.797	54.23	.0951	-.2587
#3	364.1	12.56	8.666	8.852	.1433	.1221	3.747	54.38	-.3555	-.0090

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	11.82	5.392	.4679	5.310	-.2051	.3215	853.6
Stddev	.79	.011	.0207	.126	.0711	.0075	1.0
%RSD	6.699	.2038	4.419	2.366	34.65	2.336	.1183
#1	12.40	5.404	.4693	5.284	-.2692	.3298	854.0
#2	12.15	5.382	.4466	5.447	-.1287	.3196	854.3
#3	10.92	5.389	.4879	5.200	-.2175	.3152	852.4

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3007.4	7110.6	52908.	4962.3
Stddev	1.7	4.9	63.	57.3
%RSD	.05644	.06846	.11989	1.1547
#1	3008.5	7107.9	52980.	4946.2
#2	3005.4	7107.6	52878.	5025.9
#3	3008.2	7116.2	52864.	4914.8

Zoom In Zoom Out

Sample Name: FA33931-12 Acquired: 5/17/2016 15:42:06 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 250.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0089	751.9	-.0461	4.530	-.2029	437.4	-.0116	.0764	57.63
Stddev	.1088	4.5	.0807	.069	.0040	.5	.0067	.0219	.19
%RSD	1228.	.6025	175.0	1.515	1.957	.1192	57.79	28.71	.3328
#1	.0602	757.1	-.1342	4.482	-.2067	436.8	-.0048	.0842	57.67
#2	.0475	749.3	-.0281	4.500	-.2031	437.8	-.0182	.0933	57.80
#3	-.1343	749.3	.0241	4.609	-.1988	437.7	-.0118	.0516	57.43

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	869.8	362.8	11.15	36.44	9.421	.1492	32.57	4.405	54.15
Stddev	1.4	.9	5.03	4.42	.027	.0078	2.06	.028	.08
%RSD	.1565	.2599	45.17	12.13	.2823	5.196	6.320	.6231	.1450
#1	868.6	362.5	5.333	41.03	9.423	.1459	34.00	4.403	54.06
#2	869.5	362.1	14.13	36.08	9.393	.1580	33.50	4.434	54.16
#3	871.3	363.9	13.97	32.21	9.446	.1436	30.21	4.379	54.22

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0899	-.0272	10.79	6.297	.7113	6.276	-.1444	.3256	F1234.
Stddev	.2325	.1695	2.34	.044	.0180	.020	.0969	.0258	1.
%RSD	258.5	624.0	21.74	.7055	2.527	.3258	67.11	7.927	.1134
#1	-.2263	-.1867	10.05	6.281	.6906	6.253	-.0423	.3099	1233.
#2	-.2220	-.0456	13.41	6.347	.7217	6.283	-.2351	.3554	1234.
#3	.1785	.1508	8.903	6.263	.7218	6.293	-.1559	.3114	1236.

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2955.5	7012.7	52116.	4875.4
Stddev	4.0	6.9	150.	38.1
%RSD	.13577	.09799	.28827	.78242
#1	2960.0	7019.6	51974.	4862.5
#2	2954.3	7012.6	52102.	4918.3
#3	2952.3	7005.9	52273.	4845.4

Zoom In Zoom Out

Sample Name: FA33931-13 Acquired: 5/17/2016 15:46:13 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 250.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0532	1385.	-.0644	2.197	-.1861	369.4	-.0361	.1066	56.00
Stddev	.0890	3.	.0690	.043	.0146	1.2	.0009	.0181	.08
%RSD	167.5	.2098	107.2	1.968	7.859	.3306	2.456	16.98	.1447
#1	.0489	1386.	-.1064	2.212	-.2002	369.6	-.0368	.1226	56.04
#2	-.1153	1388.	-.1020	2.148	-.1710	370.5	-.0351	.0869	55.91
#3	-.0930	1382.	.0152	2.230	-.1872	368.1	-.0363	.1103	56.06

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	F1029.	715.8	8.924	18.38	14.33	.2361	-3.049	4.935	66.51
Stddev	1.	4.6	2.888	8.55	.03	.0214	2.088	.047	.16
%RSD	.0577	.6476	32.37	46.51	.1761	9.073	68.49	.9478	.2404
#1	1029.	711.1	7.108	27.37	14.36	.2259	-2.622	4.885	66.33
#2	1029.	720.3	12.26	17.43	14.34	.2217	-1.207	4.942	66.56
#3	1030.	716.0	7.410	10.35	14.31	.2607	-5.318	4.977	66.64

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.1158	-.4506	3.435	9.039	1.782	5.656	-.2941	.3382	976.2
Stddev	.0814	.1034	.119	.047	.014	.054	.1599	.0123	.4
%RSD	70.27	22.96	3.459	.5185	.7712	.9565	54.38	3.648	.0454
#1	-.0664	-.3587	3.570	9.022	1.785	5.619	-.1460	.3444	976.6
#2	-.0713	-.4303	3.349	9.092	1.767	5.718	-.2727	.3240	975.7
#3	-.2098	-.5626	3.385	9.002	1.794	5.631	-.4637	.3462	976.4

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2995.8	7154.0	52825.	4983.9
Stddev	6.9	1.7	163.	64.5
%RSD	.23124	.02360	.30905	1.2944
#1	3002.0	7156.0	52717.	5055.2
#2	2988.3	7153.1	53013.	4929.5
#3	2997.1	7153.0	52746.	4967.0

Zoom In Zoom Out

Sample Name: FA33931-14 Acquired: 5/17/2016 15:50:20 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 250.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0263	722.1	.1095	2.241	-.1999	290.4	-.0429	.0307	54.00	637.2
Stddev	.0489	2.7	.1297	.034	.0079	.3	.0087	.0180	.05	.5
%RSD	186.3	.3719	118.4	1.516	3.962	.1013	20.29	58.52	.0961	.0710
#1	-.0293	719.4	.0238	2.233	-.2086	290.1	-.0351	.0135	54.01	636.7
#2	.0627	722.1	.2587	2.211	-.1931	290.7	-.0414	.0494	54.05	637.4
#3	.0454	724.8	.0461	2.278	-.1980	290.4	-.0523	.0293	53.95	637.5

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	272.8	3.341	15.30	8.266	.0767	-4.302	3.446	46.59	-.2280	-.2589
Stddev	2.3	1.490	4.36	.026	.0143	.161	.012	.12	.1484	.2660
%RSD	.8349	44.60	28.51	.3156	18.65	3.740	.3593	.2527	65.10	102.7
#1	274.1	2.547	16.35	8.242	.0867	-4.370	3.457	46.52	-.1773	.0298
#2	274.1	5.060	10.51	8.294	.0831	-4.418	3.449	46.73	-.3952	-.4939
#3	270.1	2.416	19.05	8.263	.0603	-4.118	3.433	46.52	-.1115	-.3126

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.122	5.665	1.606	5.207	-.1339	.3084	644.6
Stddev	.449	.101	.028	.051	.1336	.0850	.4
%RSD	8.768	1.776	1.749	.9800	99.76	27.56	.0569
#1	4.864	5.549	1.614	5.257	-.0015	.2508	644.8
#2	5.640	5.733	1.575	5.208	-.2687	.4060	644.2
#3	4.860	5.712	1.630	5.155	-.1316	.2683	644.9

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3008.2	7157.8	52513.	4927.7
Stddev	4.2	.2	74.	22.4
%RSD	.14111	.00236	.14072	.45546
#1	3006.6	7157.6	52563.	4919.8
#2	3005.0	7157.9	52428.	4953.0
#3	3013.0	7157.9	52547.	4910.2

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2016 15:54:25 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2535	39.44	1.883	2.031	2.090	39.47	2.019	2.005	1.969	2.087
Stddev	.0009	.17	.005	.002	.006	.08	.001	.001	.004	.003
%RSD	.3606	.4403	.2587	.1076	.2888	.2078	.0390	.0528	.1824	.1428
#1	.2527	39.24	1.878	2.029	2.086	39.40	2.019	2.004	1.971	2.087
#2	.2534	39.51	1.888	2.033	2.088	39.46	2.019	2.005	1.965	2.084
#3	.2545	39.56	1.882	2.032	2.097	39.56	2.020	2.006	1.970	2.090
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	43.09	41.93	40.70	2.117	1.970	40.21	1.930	2.045	1.919	1.899
Stddev	.20	.10	.26	.002	.005	.11	.002	.011	.003	.002
%RSD	.4598	.2501	.6314	.1067	.2457	.2626	.0803	.5485	.1770	.1067
#1	42.87	41.83	40.51	2.116	1.964	40.09	1.929	2.045	1.917	1.898
#2	43.14	41.92	40.60	2.115	1.971	40.25	1.932	2.034	1.922	1.902
#3	43.26	42.04	40.99	2.120	1.974	40.29	1.931	2.056	1.916	1.899
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.980	1.867	2.159	2.160	2.073	2.029	1.996
Stddev	.002	.003	.004	.003	.009	.004	.002
%RSD	.1214	.1702	.1830	.1339	.4356	.1819	.1079
#1	1.982	1.869	2.155	2.158	2.072	2.032	1.997
#2	1.980	1.868	2.159	2.158	2.064	2.025	1.994
#3	1.978	1.863	2.163	2.163	2.082	2.031	1.998
Check ?	None	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass
Value										
Range										

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2016 15:54:25 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2514.1	6693.6	48980.	4799.2
Stddev	14.3	6.8	58.	41.4
%RSD	.56744	.10215	.11768	.86291
#1	2516.5	6697.1	48920.	4843.3
#2	2527.0	6698.0	49035.	4793.0
#3	2498.7	6685.7	48985.	4761.2

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2016 15:58:21 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0006	-.0038	.0007	-.0003	-.0004	-.0102	-.0001	-.0001	-.0004
Stddev	.0001	.0071	.0005	.0002	.0000	.0005	.0001	.0000	.0002
%RSD	23.19	185.3	65.42	57.10	11.19	5.237	54.43	32.07	44.87
#1	-.0005	.0010	.0006	-.0005	-.0004	-.0097	-.0001	-.0001	-.0004
#2	-.0005	-.0005	.0012	-.0002	-.0004	-.0100	-.0001	-.0002	-.0005
#3	-.0007	-.0119	.0003	-.0002	-.0003	-.0108	-.0002	-.0001	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0010	.0074	.0401	-.0149	-.0004	F.0021	-.0109	-.0003	.0007
Stddev	.0002	.0041	.0097	.0104	.0000	.0006	.0042	.0003	.0005
%RSD	24.94	55.95	24.15	69.96	4.283	26.30	38.45	100.6	70.68
#1	-.0007	.0121	.0297	-.0031	-.0004	.0027	-.0122	-.0001	.0010
#2	-.0011	.0053	.0417	-.0188	-.0004	.0020	-.0142	-.0002	.0001
#3	-.0011	.0047	.0489	-.0229	-.0005	.0016	-.0062	-.0005	.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0014	-.0007	-.0009	.0002	-.0004	.0006	-.0001	-.0005	.0000
Stddev	.0011	.0009	.0005	.0003	.0000	.0002	.0003	.0002	.000
%RSD	84.49	126.4	52.46	204.5	6.903	24.51	207.4	34.60	132.2
#1	.0026	-.0010	-.0004	.0004	-.0004	.0007	-.0001	-.0007	.0000
#2	.0011	.0003	-.0012	-.0002	-.0004	.0007	-.0004	-.0006	.0000
#3	.0004	-.0014	-.0012	.0002	-.0004	.0005	.0001	-.0003	-.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2016 15:58:21 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3077.9	7212.6	53140.	4918.7
Stddev	6.0	7.5	214.	16.2
%RSD	.19560	.10370	.40201	.32878
#1	3084.8	7215.2	52911.	4932.5
#2	3073.8	7218.5	53334.	4900.9
#3	3075.1	7204.2	53175.	4922.6

Zoom In Zoom Out

Sample Name: FA33931-15 Acquired: 5/17/2016 16:02:33 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 250.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0213	637.8	-.0129	2.053	-.1973	274.1	-.0443	.2898	51.86	695.3
Stddev	.0653	1.0	.0920	.114	.0020	.7	.0098	.0098	.16	1.1
%RSD	306.1	.1535	713.3	5.573	.9906	.2550	22.18	3.392	.3177	.1598
#1	-.0304	637.1	.0577	1.995	-.1983	274.7	-.0331	.2898	51.70	694.8
#2	.0481	637.4	.0205	1.978	-.1985	274.4	-.0517	.2996	52.03	696.6
#3	-.0816	638.9	-.1169	2.184	-.1950	273.4	-.0479	.2799	51.85	694.6

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	333.7	14.14	19.21	7.049	3.172	3.901	3.791	40.65	-.0877	.0974
Stddev	.6	5.86	5.50	.032	.040	.528	.046	.27	.2516	.2605
%RSD	.1866	41.40	28.61	.4472	1.273	13.54	1.217	.6645	286.9	267.5
#1	333.0	18.27	20.12	7.017	3.215	3.760	3.750	40.86	-.2288	-.1979
#2	334.1	16.72	13.32	7.051	3.166	4.486	3.783	40.34	.2028	.2949
#3	334.1	7.443	24.19	7.080	3.135	3.458	3.841	40.74	-.2370	.1951

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	13.73	11.78	1.372	4.324	-.1968	1.458	637.8
Stddev	.44	.02	.011	.109	.1779	.067	1.5
%RSD	3.217	.1610	.8239	2.530	90.39	4.602	.2422
#1	13.40	11.80	1.378	4.370	-.3475	1.503	638.9
#2	13.55	11.79	1.359	4.199	-.2423	1.381	636.0
#3	14.23	11.76	1.379	4.402	-.0006	1.491	638.5

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3032.2	7208.9	53153.	5010.8
Stddev	9.3	19.9	245.	41.7
%RSD	.30543	.27663	.46166	.83250
#1	3025.9	7192.4	53433.	4989.1
#2	3042.9	7231.1	52975.	4984.4
#3	3027.9	7203.2	53052.	5058.9

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: FA33931-16 Acquired: 5/17/2016 16:06:37 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 250.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0492	855.0	-.0168	2.411	-.1856	324.1	-.0145	.0818	50.71
Stddev	.0573	6.5	.0678	.012	.0089	2.3	.0025	.0165	.09
%RSD	116.5	.7659	402.9	.5148	4.773	.7177	17.46	20.19	.1768
#1	.0011	857.6	-.0103	2.402	-.1912	326.8	-.0165	.0979	50.64
#2	.1126	847.6	-.0877	2.406	-.1754	322.5	-.0117	.0649	50.67
#3	.0338	859.9	.0475	2.426	-.1902	323.1	-.0153	.0826	50.81

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	F1123.	315.4	10.05	16.09	9.819	.1131	-1.234	7.862	60.46
Stddev	2.	1.9	3.50	3.81	.039	.0202	1.969	.026	.17
%RSD	.1605	.6103	34.80	23.66	.3930	17.83	159.5	.3345	.2747
#1	1125.	314.8	6.154	11.77	9.789	.1262	.6522	7.835	60.39
#2	1124.	313.8	12.92	18.94	9.806	.1233	-1.079	7.887	60.65
#3	1121.	317.5	11.07	17.57	9.863	.0899	-3.276	7.865	60.34

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0021	-.2302	3.201	7.654	1.628	6.182	-.3192	.3159	903.8
Stddev	.1509	.2388	.374	.098	.018	.071	.0920	.0639	1.3
%RSD	7235.	103.7	11.69	1.284	1.107	1.154	28.81	20.22	.1472
#1	.0474	-.2210	2.880	7.549	1.609	6.118	-.4238	.3162	903.4
#2	.1179	.0038	3.111	7.669	1.629	6.168	-.2509	.3797	902.7
#3	-.1715	-.4736	3.612	7.744	1.645	6.259	-.2829	.2519	905.3

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2941.1	7016.7	51741.	4846.1
Stddev	1.8	12.1	170.	9.9
%RSD	.06152	.17298	.32887	.20430
#1	2942.3	7022.3	51905.	4841.5
#2	2939.0	7025.0	51753.	4857.5
#3	2942.0	7002.8	51566.	4839.4

Zoom In Zoom Out

Sample Name: FA33931-17 Acquired: 5/17/2016 16:10:43 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 250.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0726	656.7	.0031	2.544	-.2154	260.0	-.0397	.1119	53.91	525.6
Stddev	.0718	4.0	.0165	.022	.0073	.7	.0054	.0094	.10	2.2
%RSD	98.91	.6166	537.3	.8573	3.388	.2514	13.60	8.413	.1822	.4234
#1	-.1554	659.5	.0193	2.527	-.2082	260.3	-.0435	.1214	54.00	527.9
#2	-.0333	652.1	-.0136	2.536	-.2228	259.2	-.0420	.1026	53.81	525.2
#3	-.0290	658.6	.0034	2.568	-.2153	260.4	-.0335	.1117	53.93	523.5

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	511.1	11.38	18.59	9.496	.3346	-4.078	3.389	52.68	-.0688	-.0568
Stddev	2.5	2.69	2.52	.016	.0118	2.745	.038	.10	.1333	.2904
%RSD	.4950	23.60	13.57	.1707	3.532	67.31	1.125	.1989	193.8	511.3
#1	514.0	11.14	19.66	9.501	.3322	-5.923	3.346	52.57	-.1344	-.2352
#2	509.2	8.821	20.40	9.509	.3475	-.9236	3.418	52.67	.0846	-.2135
#3	510.2	14.18	15.71	9.478	.3242	-5.386	3.402	52.78	-.1565	.2783

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.226	4.554	1.525	5.942	-.0673	.3657	607.0
Stddev	.224	.021	.029	.032	.1385	.0353	1.8
%RSD	4.284	.4602	1.919	.5354	205.8	9.649	.3039
#1	4.993	4.541	1.556	5.933	.0847	.3994	605.6
#2	5.245	4.542	1.497	5.915	-.1002	.3290	606.3
#3	5.440	4.578	1.523	5.977	-.1865	.3686	609.1

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3005.5	7148.0	53046.	4982.7
Stddev	8.0	19.4	157.	48.5
%RSD	.26776	.27123	.29601	.97278
#1	3010.4	7165.3	53011.	4942.7
#2	3009.8	7151.7	53218.	5036.6
#3	2996.2	7127.0	52909.	4968.9

Zoom In Zoom Out

Sample Name: FA33931-18 Acquired: 5/17/2016 16:14:50 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 250.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.1093	110.8	.0671	.8553	-.2151	97.61	-.1057	.0333	.3438	78.71
Stddev	.0729	1.6	.0564	.0224	.0191	1.59	.0021	.0142	.0251	.19
%RSD	66.66	1.417	84.00	2.624	8.876	1.631	1.948	42.65	7.311	.2351
#1	-.1444	112.4	.0080	.8376	-.2149	97.83	-.1079	.0350	.3722	78.53
#2	-.0256	110.8	.0730	.8477	-.2342	99.09	-.1052	.0184	.3351	78.90
#3	-.1581	109.3	.1202	.8805	-.1961	95.92	-.1039	.0467	.3242	78.69

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	103.9	2.752	-4.331	1.249	.0895	-5.468	.4123	3.921	-.1597	-.1389
Stddev	1.1	4.706	3.392	.023	.0044	.909	.0103	.077	.2872	.0815
%RSD	1.033	171.0	78.32	1.869	4.909	16.62	2.494	1.961	179.8	58.63
#1	104.3	.2669	-4.880	1.231	.0867	-6.506	.4205	3.837	-.3826	-.0832
#2	102.7	8.179	-.6979	1.275	.0946	-4.818	.4008	3.937	.1644	-.2324
#3	104.8	-.1907	-7.416	1.240	.0873	-5.079	.4157	3.989	-.2610	-.1012

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	14.72	.3277	.3987	2.316	-.1496	.0683	131.2
Stddev	1.50	.0477	.0155	.225	.0520	.0285	.3
%RSD	10.16	14.56	3.898	9.712	34.73	41.72	.2410
#1	16.39	.3211	.3810	2.332	-.1439	.0991	131.2
#2	14.25	.3783	.4048	2.084	-.2043	.0626	130.8
#3	13.51	.2836	.4102	2.533	-.1008	.0430	131.5

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3040.0	7196.7	52969.	4904.1
Stddev	2.2	16.5	158.	19.5
%RSD	.07244	.22976	.29814	.39688
#1	3039.5	7195.0	52848.	4893.8
#2	3042.4	7214.0	53148.	4892.0
#3	3038.1	7181.0	52911.	4926.6

Zoom In Zoom Out

Sample Name: FA33931-19 Acquired: 5/17/2016 16:18:59 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 250.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0752	106.7	.1055	.9854	-.2135	67.21	-.0363	.0451	1.080	74.38
Stddev	.0522	2.4	.0464	.0149	.0123	.15	.0064	.0145	.078	.09
%RSD	69.43	2.223	43.96	1.511	5.744	.2210	17.63	32.20	7.216	.1194
#1	-.1348	104.7	.1261	1.002	-.2057	67.07	-.0372	.0302	1.073	74.28
#2	-.0535	109.3	.1381	.9728	-.2276	67.18	-.0295	.0592	1.006	74.46
#3	-.0374	106.0	.0524	.9817	-.2071	67.37	-.0422	.0459	1.161	74.40

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	294.6	9.989	10.53	7.067	.0120	-7.842	2.568	4.147	-.2140	-.3374
Stddev	.2	3.200	5.68	.005	.0381	1.523	.034	.034	.1046	.2312
%RSD	.0549	32.04	53.92	.0714	316.7	19.42	1.325	.8171	48.87	68.52
#1	294.8	6.322	6.709	7.062	.0459	-6.083	2.543	4.122	-.0953	-.1795
#2	294.6	11.43	7.832	7.072	-.0292	-8.750	2.607	4.134	-.2544	-.6028
#3	294.5	12.22	17.06	7.066	.0193	-8.691	2.555	4.186	-.2923	-.2300

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	18.65	.6899	.2417	5.146	-.0831	.4886	104.4
Stddev	1.36	.0240	.0159	.078	.1144	.0375	.6
%RSD	7.293	3.485	6.587	1.518	137.6	7.670	.5669
#1	19.10	.7176	.2588	5.207	-.1368	.4463	104.0
#2	19.73	.6745	.2389	5.058	.0482	.5017	105.0
#3	17.13	.6777	.2274	5.174	-.1608	.5177	104.0

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3023.8	7200.6	52298.	4849.0
Stddev	6.5	37.9	375.	38.8
%RSD	.21605	.52585	.71759	.79935
#1	3021.2	7182.0	51966.	4808.1
#2	3031.3	7244.2	52705.	4885.1
#3	3019.1	7175.7	52224.	4853.9

Zoom In Zoom Out

Sample Name: FA33931-20 Acquired: 5/17/2016 16:23:06 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 250.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.1002	668.3	.0721	.9957	-.2138	377.3	.0842	-.0280	.6902	392.0
Stddev	.1180	5.2	.0635	.0512	.0153	1.3	.0104	.0111	.0872	.5
%RSD	117.8	.7791	88.15	5.140	7.142	.3389	12.36	39.65	12.63	.1224
#1	-.2362	664.2	.1198	1.001	-.2196	376.1	.0841	-.0343	.7782	392.2
#2	-.0249	666.5	.0000	1.044	-.1964	377.2	.0739	-.0345	.6039	391.5
#3	-.0395	674.2	.0965	.9419	-.2252	378.7	.0947	-.0152	.6883	392.4

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	167.0	10.93	32.71	2.927	-.1073	-3.080	1.780	27.34	-.0393	-.3382
Stddev	1.9	5.36	2.33	.040	.0190	2.763	.017	.21	.0911	.2675
%RSD	1.131	49.06	7.121	1.370	17.72	89.70	.9736	.7788	231.5	79.09
#1	168.6	4.761	33.93	2.966	-.1292	-3.682	1.771	27.40	-.0183	-.4238
#2	164.9	13.54	30.03	2.928	-.0951	-5.492	1.800	27.51	-.1391	-.5524
#3	167.5	14.48	34.18	2.886	-.0976	-.0657	1.769	27.10	.0394	-.0384

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	44.53	3.010	.3261	2.580	-.2226	.0723	347.0
Stddev	.89	.073	.0176	.021	.0759	.0399	.0
%RSD	2.005	2.424	5.385	.8309	34.08	55.13	.0039
#1	45.16	3.094	.3084	2.595	-.1743	.1163	347.0
#2	43.51	2.960	.3264	2.555	-.3101	.0385	347.0
#3	44.93	2.976	.3436	2.588	-.1835	.0622	347.0

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	3016.1	7204.4	52496.	4930.3
Stddev	5.0	14.2	142.	31.2
%RSD	.16643	.19754	.27094	.63185
#1	3015.2	7213.2	52621.	4965.1
#2	3011.6	7187.9	52341.	4904.9
#3	3021.6	7211.9	52527.	4921.0

Zoom In Zoom Out

Sample Name: FA33931-21 Acquired: 5/17/2016 16:27:13 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 250.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.1057	117.3	-.0336	.6549	-.2109	166.2	-.0115	-.0267	2.039	175.1
Stddev	.1185	4.1	.0181	.0244	.0156	1.3	.0060	.0185	.068	.1
%RSD	112.1	3.496	53.94	3.726	7.418	.7556	51.90	69.06	3.356	.0752
#1	-.1195	121.6	-.0160	.6310	-.2134	167.2	-.0060	-.0168	2.102	175.3
#2	.0190	113.5	-.0326	.6540	-.2252	166.7	-.0107	-.0480	1.966	175.0
#3	-.2167	116.7	-.0522	.6798	-.1942	164.8	-.0178	-.0153	2.048	175.0

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	279.2	10.28	19.16	4.985	-.1562	5.320	.7342	7.710	-.3579	-.3317
Stddev	.3	4.73	3.75	.009	.0125	.488	.0387	.035	.0325	.1122
%RSD	.1035	46.03	19.57	.1728	7.997	9.182	5.277	.4529	9.090	33.84
#1	279.5	14.28	23.48	4.977	-.1645	5.516	.7555	7.744	-.3428	-.2523
#2	279.0	5.057	16.74	4.985	-.1419	5.681	.7577	7.710	-.3358	-.2826
#3	279.0	11.51	17.26	4.994	-.1624	4.764	.6895	7.674	-.3953	-.4601

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	7.637	1.328	.1867	5.127	-.3177	.3905	202.5
Stddev	.794	.017	.0208	.105	.1046	.0218	.6
%RSD	10.40	1.246	11.15	2.045	32.91	5.589	.2994
#1	8.529	1.342	.1721	5.171	-.3039	.3819	202.1
#2	7.375	1.310	.1775	5.202	-.2208	.3743	202.1
#3	7.007	1.333	.2106	5.007	-.4285	.4153	203.2

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	3023.7	7154.5	52999.	4919.1
Stddev	11.9	28.2	118.	16.3
%RSD	.39473	.39436	.22316	.33195
#1	3033.4	7172.5	53078.	4928.3
#2	3027.5	7169.1	53057.	4928.7
#3	3010.4	7122.0	52863.	4900.2

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/17/2016 16:31:21 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0083	.1949	.0095	.2124	.0046	1.019	.0049	.0534	.0097	.0264
Stddev	.0003	.0083	.0004	.0001	.0001	.002	.0000	.0001	.0003	.0001
%RSD	4.060	4.236	4.474	.0659	1.465	.2218	.3998	.1694	3.088	.5004
#1	.0083	.2008	.0091	.2123	.0047	1.021	.0049	.0534	.0101	.0262
#2	.0087	.1985	.0095	.2125	.0046	1.019	.0049	.0533	.0095	.0264
#3	.0080	.1855	.0100	.2124	.0046	1.017	.0049	.0535	.0096	.0265

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	.3075	10.89	5.413	.0158	.0474	10.43	.0412	.0056	.0041	.0074
Stddev	.0031	.04	.015	.0001	.0002	.02	.0001	.0002	.0014	.0010
%RSD	1.010	.3702	.2710	.3395	.3432	.1842	.1802	3.566	33.21	13.26
#1	.3106	10.93	5.428	.0158	.0473	10.44	.0412	.0054	.0056	.0067
#2	.3074	10.85	5.399	.0158	.0475	10.41	.0413	.0058	.0029	.0070
#3	.3044	10.89	5.412	.0157	.0472	10.45	.0413	.0055	.0039	.0085

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	.0494	.0488	.0101	.0097	.0093	.0479	.0212
Stddev	.0005	.0000	.0001	.0001	.0002	.0003	.0000
%RSD	.9841	.0526	1.137	.6148	2.638	.5363	.2194
#1	.0491	.0488	.0101	.0096	.0091	.0476	.0212
#2	.0491	.0488	.0101	.0097	.0095	.0481	.0213
#3	.0500	.0488	.0099	.0097	.0093	.0479	.0212

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2858.7	7000.6	51399.	4821.5
Stddev	4.5	11.2	85.	24.9
%RSD	.15631	.16032	.16446	.51603
#1	2862.8	7011.4	51471.	4848.7
#2	2859.2	7001.5	51306.	4800.0
#3	2854.0	6989.0	51419.	4815.8

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/17/2016 16:35:26 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0015	F506.0	.0006	-.0002	-.0008	479.7	-.0032	-.0006	-.0003
Stddev	.0002	3.1	.0004	.0001	.0001	6.1	.0001	.0001	.0003
%RSD	14.53	.6224	64.03	23.45	13.10	1.280	2.618	10.51	126.3
#1	-.0014	505.3	.0002	-.0002	-.0009	481.9	-.0032	-.0006	-.0007
#2	-.0017	509.5	.0009	-.0003	-.0007	472.7	-.0032	-.0007	-.0002
#3	-.0013	503.3	.0008	-.0002	-.0009	484.4	-.0031	-.0006	.0000

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)
Avg	.0002	189.8	.2187	F526.9	-.0013	.0001	.2018	.0006	.0021
Stddev	.0001	.3	.0086	1.4	.0000	.0002	.0069	.0000	.0011
%RSD	70.36	.1659	3.915	.2671	1.429	322.0	3.435	7.604	52.69
#1	.0003	189.8	.2171	526.9	-.0012	-.0001	.2019	.0006	.0017
#2	.0001	190.1	.2111	528.3	-.0012	.0003	.1948	.0007	.0013
#3	.0001	189.5	.2280	525.5	-.0013	.0000	.2087	.0006	.0033

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	-.0025	-.0025	.0148	-.0002	.0000	-.0011	.0002	-.0003	-.0017
Stddev	.0012	.0028	.0012	.0005	.000	.0001	.0010	.0003	.0001
%RSD	45.60	113.5	8.467	294.6	5646.	6.720	565.9	96.50	4.083
#1	-.0025	-.0013	.0161	.0004	-.0002	-.0010	-.0003	-.0003	-.0018
#2	-.0037	-.0004	.0146	-.0005	.0002	-.0012	.0013	-.0001	-.0016
#3	-.0014	-.0057	.0136	-.0005	.0000	-.0011	-.0004	-.0007	-.0018

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2227.7	6136.5	43127.	4536.7
Stddev	2.9	4.3	41.	26.4
%RSD	.12969	.06983	.09393	.58106
#1	2226.6	6138.8	43122.	4555.5
#2	2231.0	6131.6	43170.	4547.9
#3	2225.5	6139.3	43090.	4506.6

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 5/17/2016 16:39:45 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	F1.029	489.9	1.032	.5390	.5324	474.6	.9855	.4887	.5192
Stddev	.003	1.5	.003	.0013	.0027	8.1	.0022	.0012	.0014
%RSD	.3331	.2961	.3011	.2327	.5036	1.699	.2265	.2360	.2630
#1	1.028	489.1	1.029	.5403	.5354	483.9	.9829	.4875	.5196
#2	1.026	491.5	1.031	.5378	.5303	469.5	.9866	.4888	.5177
#3	1.033	489.0	1.035	.5391	.5314	470.5	.9870	.4897	.5203

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.5760	190.6	.2011	F517.7	.5465	.9183	.2034	.9458	1.018
Stddev	.0009	.4	.0153	2.4	.0010	.0030	.0087	.0025	.003
%RSD	.1516	.1986	7.594	.4558	.1751	.3214	4.263	.2609	.2550
#1	.5754	190.9	.1919	520.4	.5468	.9153	.2087	.9430	1.015
#2	.5757	190.2	.2187	516.0	.5454	.9184	.1934	.9476	1.020
#3	.5770	190.7	.1926	516.7	.5473	.9212	.2082	.9467	1.019

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.9714	.9682	.0720	.8510	1.080	1.076	.9976	.4851	.9812
Stddev	.0033	.0009	.0007	.0027	.002	.001	.0010	.0009	.0025
%RSD	.3358	.0944	.9260	.3222	.1544	.0904	.1041	.1958	.2500
#1	.9676	.9674	.0713	.8478	1.081	1.076	.9965	.4853	.9784
#2	.9728	.9692	.0726	.8526	1.078	1.075	.9985	.4840	.9828
#3	.9737	.9681	.0721	.8525	1.080	1.077	.9977	.4859	.9823

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2196.0	6119.2	43482.	4555.9
Stddev	3.7	9.3	97.	24.9
%RSD	.16847	.15133	.22206	.54626
#1	2200.2	6129.2	43430.	4532.9
#2	2194.2	6117.4	43594.	4582.4
#3	2193.5	6111.0	43424.	4552.5

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2016 16:43:58 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2579	40.14	1.927	2.068	2.117	40.10	2.061	2.045	2.005
Stddev	.0008	.22	.006	.012	.016	.30	.003	.003	.004
%RSD	.2975	.5418	.3157	.5666	.7624	.7550	.1513	.1448	.1789
#1	.2572	40.27	1.921	2.077	2.128	40.31	2.058	2.042	2.007
#2	.2587	40.26	1.927	2.073	2.125	40.24	2.061	2.046	2.007
#3	.2579	39.89	1.933	2.055	2.099	39.76	2.065	2.048	2.000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.121	43.92	42.54	41.49	2.159	2.009	40.74	1.970	2.089
Stddev	.003	.34	.28	.35	.004	.007	.26	.005	.005
%RSD	.1326	.7671	.6484	.8318	.1859	.3629	.6290	.2478	.2463
#1	2.118	44.17	42.70	41.66	2.156	2.001	40.91	1.966	2.086
#2	2.123	44.05	42.70	41.71	2.163	2.011	40.86	1.970	2.085
#3	2.122	43.53	42.22	41.09	2.156	2.016	40.44	1.975	2.095
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.958	1.944	2.023	1.909	2.194	F2.201	2.105	2.065	2.040
Stddev	.004	.006	.005	.007	.014	.005	.003	.001	.005
%RSD	.2317	.3227	.2466	.3951	.6236	.2122	.1628	.0533	.2259
#1	1.953	1.937	2.018	1.901	2.201	2.197	2.102	2.066	2.036
#2	1.962	1.948	2.025	1.910	2.203	2.206	2.105	2.066	2.040
#3	1.958	1.948	2.027	1.916	2.178	2.200	2.109	2.064	2.045
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value						2.000			
Range						10.00%			

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/17/2016 16:43:58 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2483.0	6608.4	48355.	4705.1
Stddev	8.9	16.8	80.	11.2
%RSD	.35946	.25426	.16511	.23710
#1	2489.2	6623.1	48346.	4711.4
#2	2487.0	6612.1	48280.	4692.2
#3	2472.8	6590.1	48439.	4711.7

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/17/2016 16:47:54 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0006	.0153	.0012	-.0001	-.0004	.0093	-.0002	-.0001	-.0004
Stddev	.0001	.0042	.0002	.0001	.0001	.0034	.0001	.0001	.0001
%RSD	20.65	27.61	19.69	183.9	22.86	36.14	38.23	70.05	29.96
#1	-.0005	.0170	.0015	-.0002	-.0004	.0104	-.0001	-.0001	-.0003
#2	-.0006	.0185	.0010	.0001	-.0003	.0120	-.0001	-.0001	-.0005
#3	-.0007	.0105	.0011	-.0001	-.0005	.0056	-.0002	-.0003	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0011	.0212	.0528	-.0082	-.0006	F.0021	-.0071	-.0002	.0006
Stddev	.0002	.0060	.0184	.0152	.0001	.0006	.0118	.0002	.0003
%RSD	19.15	28.50	34.83	185.8	12.27	26.62	166.5	82.98	51.50
#1	-.0009	.0281	.0718	-.0097	-.0005	.0027	.0061	-.0001	.0009
#2	-.0010	.0177	.0517	.0077	-.0006	.0021	-.0166	-.0002	.0007
#3	-.0013	.0177	.0350	-.0225	-.0006	.0016	-.0107	-.0004	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	.0003	.0000	.0002	-.0004	.0004	-.0002	-.0007	-.0002
Stddev	.0007	.0003	.0005	.0001	.0001	.0001	.0005	.0002	.0001
%RSD	117.6	85.91	6364.	70.20	23.15	29.51	282.5	25.77	33.80
#1	.0014	.0005	.0005	.0002	-.0004	.0004	-.0001	-.0005	-.0001
#2	.0005	.0004	.0000	.0000	-.0003	.0006	-.0008	-.0008	-.0001
#3	.0000	.0000	-.0004	.0003	-.0005	.0003	.0003	-.0008	-.0002
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Inst QC: MA13165

Zoom In
Zoom Out

Sample Name: CCB Acquired: 5/17/2016 16:47:54 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3039.5	7092.2	52972.	4859.2
Stddev	1.3	4.3	85.	24.6
%RSD	.04152	.06115	.15968	.50575
#1	3040.8	7094.5	52969.	4837.1
#2	3039.4	7087.2	53057.	4885.7
#3	3038.2	7094.8	52888.	4854.9

Raw Data MA13165 page 97 of 97

NOTE: The remaining raw data for this batch is not relevant to this job. As such it has been omitted.

SGS ACCUTEST FA33973

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Ag 328.068 {103}	X	3	V	-0.009834	0.000000	No
			Fe	-0.000001	0.000000	No
			Mg	0.000002	0.000000	No
Al 396.152 { 85}	X	1	Mo	0.035224	0.000000	No
As 189.042 {478}	X	5	Fe	-0.000030	0.000000	No
			Cr	-0.000226	0.000000	No
			Mo	-0.000017	0.000000	No
			Al	0.000004	0.000000	No
			Ca	0.000002	0.000000	No
Ba 455.403 { 74}	X	1	Fe	0.000004	0.000000	No
Be 313.042 {108}	X	2	V	0.000115	0.000000	No
			Ti	-0.000059	0.000000	No
Ca 317.933 {106}	X	None				
Cd 226.502 {449}	X	4	Fe	0.000107	0.000000	No
			Ca	0.000001	0.000000	No
			Al	-0.000001	0.000000	No
			Ti	0.000151	0.000000	No
Co 228.616 {447}	X	3	Mo	-0.001220	0.000000	No
			Ti	0.003012	0.000000	No
			Fe	-0.000001	0.000000	No
Cr 267.716 {126}	X	3	Al	0.000005	0.000000	No
			Fe	-0.000018	0.000000	No
			Ca	0.000002	0.000000	No
Cu 324.754 {104}	X	10	Fe	-0.000146	0.000000	No
			Ca	0.000002	0.000000	No
			Mo	0.000528	0.000000	No
			Sn	-0.000012	0.000000	No
			V	-0.000158	0.000000	No
			Ti	-0.000251	0.000000	No
			Al	0.000004	0.000000	No
			Mg	0.000002	0.000000	No
			Co	-0.000787	0.000000	No
			Cd	0.000240	0.000000	No
Fe 259.940 {130}	X	None				
In 230.606 {446}*	X	None				
K 766.490 { 44}	X	None				
Mg 279.079 {121}	X	None				
Mn 257.610 {131}	X	2	Fe	-0.000006	0.000000	No
			Mg	0.000001	0.000000	No
Mo 202.030 {467}	X	1	Fe	-0.000017	0.000000	No
Na 589.592 { 57}	X	None				
Ni 231.604 {445}	X	7	Fe	-0.000042	0.000000	No
			Co	-0.000054	0.000000	No
			Mo	0.000005	0.000000	No
			Sb	-0.000120	0.000000	No
			Al	0.000003	0.000000	No
			Be	-0.000269	0.000000	No
			Tl	0.000440	0.000000	No
Pb 220.353 {453}	X	9	Al	0.000294	0.000000	No
			Fe	-0.000038	0.000000	No
			Mo	-0.001012	0.000000	No
			Cu	0.001070	0.000000	No
			Ti	0.000036	0.000000	No
			Si	0.000071	0.000000	No
			Ca	-0.000001	0.000000	No
			Cr	0.000050	0.000000	No
			Mg	0.000004	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Sb 206.833 {463}	☒	10	Fe	0.000018	0.000000	No
			Cr	0.012140	0.000000	No
			Mo	-0.004076	0.000000	No
			V	-0.000611	0.000000	No
			Sn	-0.010736	0.000000	No
			Ti	0.000040	0.000000	No
			Ca	-0.000001	0.000000	No
			Ni	-0.000438	0.000000	No
			Mg	-0.000002	0.000000	No
			Al	0.000003	0.000000	No
Se 196.090 {472}	☒	10	Fe	-0.000007	0.000000	No
			Ca	-0.000001	0.000000	No
			Mn	0.000574	0.000000	No
			Mo	0.000111	0.000000	No
			Al	-0.000015	0.000000	No
			V	0.000000	0.000000	No
			Zn	0.000000	0.000000	No
			Sr	0.000137	0.000000	No
			As	-0.000032	0.000000	No
			Be	0.000212	0.000000	No
Si 212.412 {459}	☒	1	Mo	0.019120	0.000000	No
Sn 189.989 {477}	☒	None				
Sr 407.771 { 83}	☒	1	Ca	0.000017	0.000000	No
Ti 334.941 {101}	☒	1	Ca	-0.000007	0.000000	No
Tl 190.856 {477}	☒	11	Co	0.001145	0.000000	No
			Fe	0.000004	0.000000	No
			Al	-0.000011	0.000000	No
			Ba	-0.000051	0.000000	No
			Ti	-0.002651	0.000000	No
			Sb	0.000012	0.000000	No
			Ca	0.000003	0.000000	No
			Cr	0.000230	0.000000	No
			Mg	-0.000003	0.000000	No
			Mn	0.000818	0.000000	No
			V	-0.038621	0.000000	No
V 292.402 {115}	☒	5	Fe	0.000008	0.000000	No
			Cr	-0.002590	0.000000	No
			Mo	-0.005797	0.000000	No
			Ti	0.000364	0.000000	No
			Mn	-0.000693	0.000000	No
Y 224.306 {450}*	☒	None				
Y 360.073 { 94}*	☒	None				
Y 371.030 { 91}*	☒	None				
Zn 206.200 {463}	☒	5	Cr	-0.000965	0.000000	No
			Al	0.000005	0.000000	No
			Ca	0.000003	0.000000	No
			Fe	0.000006	0.000000	No
			As	0.001128	0.000000	No

	Element, Wavelength and Order	Date of Fit	Date of Cal.	Type of Fit	Weighting	A0	A1	A2	n (Exponent)
	Ag 328.068 {103}	5/17/2016 10:33:58	5/17/2016 10:03:30	Linear	1/Conc	-0.001171	0.639550	0.000000	1.000000
	Al 396.152 { 85}	5/17/2016 10:33:58	5/17/2016 10:03:30	Linear	1/Conc	-0.009460	0.168887	0.000000	1.000000
	As 189.042 {478}	5/17/2016 10:33:58	5/17/2016 10:03:30	Linear	1/Conc	-0.000189	0.255458	0.000000	1.000000
	Ba 455.403 { 74}	5/17/2016 10:33:58	5/17/2016 10:03:30	Linear	1/Conc	0.014908	13.878966	0.000000	1.000000
	Be 313.042 {108}	5/17/2016 10:33:58	5/17/2016 10:03:30	Linear	1/Conc	-0.000032	7.729815	0.000000	1.000000
	Ca 317.933 {106}	5/17/2016 10:33:58	5/17/2016 10:03:30	Linear	1/Conc	0.002429	0.252171	0.000000	1.000000
	Cd 226.502 {449}	5/17/2016 10:33:58	5/17/2016 10:03:30	Linear	1/Conc	-0.000616	5.359030	0.000000	1.000000
	Co 228.616 {447}	5/17/2016 10:33:58	5/17/2016 10:03:30	Linear	1/Conc	0.000155	2.553587	0.000000	1.000000
	Cr 267.716 {126}	5/17/2016 10:33:58	5/17/2016 10:03:30	Linear	1/Conc	0.000024	0.447746	0.000000	1.000000
	Cu 324.754 {104}	5/17/2016 10:33:58	5/17/2016 10:03:30	Linear	1/Conc	0.005167	0.719255	0.000000	1.000000
	Fe 259.940 {130}	5/17/2016 10:33:58	5/17/2016 10:03:30	Linear	1/Conc	0.001400	0.150665	0.000000	1.000000
	In 230.606 {446}*	5/17/2016 10:33:58	5/5/2010 12:30:54	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	K 766.490 { 44}	5/17/2016 10:33:58	5/17/2016 10:03:30	Linear	1/Conc	0.001180	0.146483	0.000000	1.000000
	Mg 279.079 {121}	5/17/2016 10:33:58	5/17/2016 10:03:30	Linear	1/Conc	-0.000605	0.023301	0.000000	1.000000
	Mn 257.610 {131}	5/17/2016 10:33:58	5/17/2016 10:03:30	Linear	1/Conc	0.000330	3.026575	0.000000	1.000000
	Mo 202.030 {467}	5/17/2016 10:33:58	5/17/2016 10:03:30	Linear	1/Conc	0.001066	1.398595	0.000000	1.000000
	Na 589.592 { 57}	5/17/2016 10:33:58	5/17/2016 10:03:30	Linear	1/Conc	0.009206	0.397270	0.000000	1.000000
	Ni 231.604 {445}	5/17/2016 10:33:58	5/17/2016 10:03:30	Linear	1/Conc	-0.001042	1.697206	0.000000	1.000000
	Pb 220.353 {453}	5/17/2016 10:33:58	5/17/2016 10:03:30	Linear	1/Conc	-0.001445	1.308245	0.000000	1.000000
	Sb 206.833 {463}	5/17/2016 10:33:58	5/17/2016 10:03:30	Linear	1/Conc	0.000896	0.279838	0.000000	1.000000
	Se 196.090 {472}	5/17/2016 10:33:58	5/17/2016 10:03:30	Linear	1/Conc	-0.000247	0.181087	0.000000	1.000000
	Si 212.412 {459}	5/17/2016 10:33:58	5/17/2016 10:03:30	Linear	1/Conc	0.004512	0.446954	0.000000	1.000000
	Sn 189.989 {477}	5/17/2016 10:33:58	5/17/2016 10:03:30	Linear	1/Conc	0.000257	0.577516	0.000000	1.000000
	Sr 407.771 { 83}	5/17/2016 10:33:58	5/17/2016 10:03:30	Linear	1/Conc	0.004394	17.742915	0.000000	1.000000
	Ti 334.941 {101}	5/17/2016 10:33:58	5/17/2016 10:03:30	Linear	1/Conc	0.001129	1.947263	0.000000	1.000000
	Tl 190.856 {477}	5/17/2016 10:33:58	5/17/2016 10:03:30	Linear	1/Conc	-0.003717	0.620008	0.000000	1.000000
	V 292.402 {115}	5/17/2016 10:33:58	5/17/2016 10:03:30	Linear	1/Conc	-0.000202	0.696916	0.000000	1.000000
	Y 224.306 {450}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	Y 360.073 { 94}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	Y 371.030 { 91}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	Zn 206.200 {463}	5/17/2016 10:33:58	5/17/2016 10:03:30	Linear	1/Conc	0.001508	3.398369	0.000000	1.000000

	Element, Wavelength and Order	Correlation	Std Error of Est	Predicted MDL	Predicted MQL	Status	Reslope		QC Norm	
							Slope	Y-int	Slope factor	Offset
	Ag 328.068 {103}	0.999976	0.000041	0.000367	0.001225	OK.	1.000000	0.000000	1	0
	Al 396.152 { 85}	0.999870	0.004397	0.010099	0.033664	OK.	1.000000	0.000000	1	0
	As 189.042 {478}	0.999875	0.000325	0.000596	0.001987	OK.	1.000000	0.000000	1	0
	Ba 455.403 { 74}	0.999967	0.009113	0.000175	0.000584	OK.	1.000000	0.000000	1	0
	Be 313.042 {108}	0.999970	0.004827	0.000083	0.000276	OK.	1.000000	0.000000	1	0
	Ca 317.933 {106}	0.999938	0.004538	0.003098	0.010326	OK.	1.000000	0.000000	1	0
	Cd 226.502 {449}	0.999991	0.001847	0.000043	0.000143	OK.	1.000000	0.000000	1	0
	Co 228.616 {447}	0.999999	0.000304	0.000097	0.000324	OK.	1.000000	0.000000	1	0
	Cr 267.716 {126}	0.999997	0.000085	0.000294	0.000980	OK.	1.000000	0.000000	1	0
	Cu 324.754 {104}	0.999970	0.000450	0.000270	0.000901	OK.	1.000000	0.000000	1	0
	Fe 259.940 {130}	0.999603	0.006842	0.002578	0.008593	OK.	1.000000	0.000000	1	0
	In 230.606 {446}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	K 766.490 { 44}	0.999876	0.003723	0.023758	0.079194	OK.	1.000000	0.000000	1	0
	Mg 279.079 {121}	0.999948	0.000383	0.020263	0.067544	OK.	1.000000	0.000000	1	0
	Mn 257.610 {131}	0.999973	0.001788	0.000041	0.000135	OK.	1.000000	0.000000	1	0
	Mo 202.030 {467}	0.999990	0.000501	0.000114	0.000379	OK.	1.000000	0.000000	1	0
	Na 589.592 { 57}	0.999925	0.007841	0.008584	0.028615	OK.	1.000000	0.000000	1	0
	Ni 231.604 {445}	0.999998	0.000244	0.000147	0.000491	OK.	1.000000	0.000000	1	0
	Pb 220.353 {453}	0.999779	0.002226	0.000445	0.001482	OK.	1.000000	0.000000	1	0
	Sb 206.833 {463}	0.999923	0.000279	0.000872	0.002907	OK.	1.000000	0.000000	1	0
	Se 196.090 {472}	0.999944	0.000155	0.001285	0.004283	OK.	1.000000	0.000000	1	0
	Si 212.412 {459}	0.999808	0.000719	0.000386	0.001287	OK.	1.000000	0.000000	1	0
	Sn 189.989 {477}	0.999944	0.000494	0.000220	0.000734	OK.	1.000000	0.000000	1	0
	Sr 407.771 { 83}	0.999984	0.008003	0.000081	0.000270	OK.	1.000000	0.000000	1	0
	Ti 334.941 {101}	0.999947	0.001621	0.000110	0.000366	OK.	1.000000	0.000000	1	0
	Tl 190.856 {477}	0.999979	0.000308	0.000599	0.001997	OK.	1.000000	0.000000	1	0
	V 292.402 {115}	0.999998	0.000108	0.000244	0.000815	OK.	1.000000	0.000000	1	0
	Y 224.306 {450}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Y 360.073 { 94}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Y 371.030 { 91}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Zn 206.200 {463}	0.999986	0.001464	0.000050	0.000166	OK.	1.000000	0.000000	1	0

Zoom In ▶ Zoom Out

Sample Name: Blank Acquired: 5/18/2016 9:41:52 Type: Cal
Method: 60102007_041712(v127) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.0016	-.0003	.0000	.0263	.0045	.0115	.0006	.0008	.0002
Stddev	.0001	.0020	.000	.0019	.0010	.0007	.0003	.0002	.0001
%RSD	4.203	724.7	13890.	7.058	22.45	5.943	43.69	23.51	31.06
#1	-.0015	.0003	.0001	.0276	.0037	.0107	.0008	.0009	.0002
#2	-.0016	-.0025	.0000	.0271	.0056	.0121	.0006	.0008	.0001
#3	-.0015	.0014	-.0001	.0241	.0041	.0117	.0003	.0006	.0003

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0040	.0040	-.0122	-.0003	.0014	.0026	.0023	.0007	-.0013
Stddev	.0001	.0004	.0040	.0007	.0002	.0003	.0039	.0003	.0006
%RSD	2.469	9.168	33.13	261.4	14.68	13.27	166.9	41.23	50.63
#1	.0040	.0044	-.0086	.0005	.0016	.0029	.0013	.0010	-.0016
#2	.0041	.0038	-.0165	-.0004	.0015	.0026	.0066	.0005	-.0005
#3	.0040	.0037	-.0114	-.0010	.0012	.0022	-.0010	.0006	-.0016

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0012	.0001	.0058	.0003	.0139	.0025	-.0033	.0001	.0032
Stddev	.0003	.0004	.0002	.0001	.0012	.0003	.0004	.0001	.0001
%RSD	20.58	376.7	3.973	28.85	8.930	11.07	12.27	160.9	2.518
#1	.0015	.0006	.0058	.0004	.0127	.0026	-.0035	.0000	.0032
#2	.0010	-.0002	.0060	.0003	.0138	.0027	-.0029	.0001	.0031
#3	.0012	.0000	.0055	.0002	.0152	.0022	-.0036	.0001	.0032

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2818.7	6474.0	51165.	4042.4
Stddev	4.7	20.9	181.	22.5
%RSD	.16720	.32320	.35317	.55661
#1	2821.9	6491.8	51270.	4016.7
#2	2820.9	6479.2	50956.	4052.2
#3	2813.3	6450.9	51269.	4058.3

◀ Zoom In ▶ Zoom Out

Sample Name: LowStd Acquired: 5/18/2016 9:45:19 Type: Cal
Method: 60102007_041712(v127) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0342	1.820	.1220	7.693	4.338	2.692	2.829	1.350	.2270	.3515
Stddev	.0003	.008	.0001	.034	.013	.005	.001	.001	.0004	.0005
%RSD	.8232	.4292	.0981	.4388	.2978	.1837	.0427	.0477	.1971	.1509
#1	.0341	1.819	.1219	7.697	4.346	2.692	2.828	1.350	.2272	.3509
#2	.0345	1.812	.1219	7.657	4.323	2.688	2.828	1.349	.2273	.3519
#3	.0340	1.828	.1221	7.724	4.344	2.697	2.830	1.349	.2265	.3518

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.796	1.623	.2646	1.541	.7319	4.602	.8859	.6444	.1344	.0868
Stddev	.010	.008	.0005	.004	.0013	.011	.0010	.0015	.0003	.0001
%RSD	.5331	.4730	.1720	.2567	.1721	.2394	.1100	.2384	.2263	.1593
#1	1.802	1.624	.2648	1.541	.7309	4.596	.8865	.6434	.1347	.0869
#2	1.785	1.615	.2641	1.546	.7316	4.594	.8864	.6462	.1341	.0866
#3	1.801	1.630	.2649	1.538	.7333	4.614	.8848	.6436	.1346	.0869

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.2235	.3035	10.25	.9931	.2908	.3577	1.812
Stddev	.0006	.0004	.02	.0016	.0010	.0007	.001
%RSD	.2668	.1189	.2110	.1624	.3562	.1848	.0518
#1	.2242	.3039	10.26	.9925	.2904	.3569	1.813
#2	.2231	.3033	10.22	.9950	.2900	.3581	1.811
#3	.2232	.3032	10.25	.9919	.2919	.3580	1.811

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2621.1	6351.0	49632.	3986.6
Stddev	3.7	13.4	344.	11.8
%RSD	.13928	.21137	.69310	.29699
#1	2617.7	6335.6	49728.	4000.1
#2	2620.6	6359.6	49251.	3978.1
#3	2625.0	6357.9	49918.	3981.5

◀ Zoom In ▶ Zoom Out

Sample Name: MidStd Acquired: 5/18/2016 9:48:28 Type: Cal
Method: 60102007_041712(v127) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1372	7.594	.5002	30.75	17.52	11.16	11.36	5.337	.9048	1.400
Stddev	.0004	.025	.0006	.09	.04	.03	.01	.005	.0019	.005
%RSD	.2824	.3308	.1156	.2972	.2404	.2326	.1201	.0902	.2086	.3334
#1	.1368	7.579	.5000	30.72	17.51	11.16	11.35	5.332	.9070	1.403
#2	.1372	7.580	.5009	30.68	17.48	11.14	11.37	5.339	.9034	1.403
#3	.1375	7.623	.4998	30.86	17.57	11.19	11.37	5.341	.9042	1.395

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7.039	6.935	1.090	6.174	2.905	19.45	3.474	2.673	.5412	.3521
Stddev	.017	.018	.008	.014	.007	.04	.001	.009	.0010	.0009
%RSD	.2412	.2564	.7388	.2223	.2314	.2306	.0154	.3328	.1838	.2568
#1	7.034	6.931	1.085	6.162	2.898	19.47	3.474	2.665	.5406	.3522
#2	7.024	6.920	1.086	6.170	2.906	19.40	3.474	2.671	.5407	.3529
#3	7.057	6.955	1.100	6.189	2.911	19.49	3.475	2.682	.5424	.3511

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.9324	1.172	40.95	3.999	1.190	1.411	7.252
Stddev	.0013	.001	.11	.007	.004	.001	.007
%RSD	.1423	.0733	.2687	.1878	.3263	.0703	.1000
#1	.9318	1.171	40.91	3.991	1.186	1.411	7.246
#2	.9340	1.173	40.87	4.000	1.191	1.412	7.260
#3	.9315	1.171	41.08	4.006	1.194	1.410	7.251

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2438.1	6253.2	49051.	4021.8
Stddev	5.1	2.5	288.	10.1
%RSD	.20915	.04006	.58727	.25066
#1	2440.6	6250.5	49176.	4014.2
#2	2441.4	6255.4	49256.	4033.2
#3	2432.2	6253.8	48722.	4017.8

◀ Zoom In ▶ Zoom Out

Sample Name: HighStd Acquired: 5/18/2016 9:51:34 Type: Cal
Method: 60102007_041712(v127) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.2849	15.72	1.028	63.24	35.91	22.81	23.02	10.85	1.863	2.888
Stddev	.0007	.02	.001	.10	.08	.06	.02	.01	.002	.003
%RSD	.2393	.1208	.1216	.1533	.2331	.2539	.1033	.0890	.1091	.0974
#1	.2851	15.74	1.029	63.23	35.95	22.82	23.04	10.86	1.861	2.885
#2	.2854	15.70	1.028	63.15	35.81	22.74	23.02	10.84	1.865	2.891
#3	.2841	15.71	1.027	63.34	35.96	22.85	22.99	10.84	1.863	2.887

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	13.67	14.24	2.204	12.32	5.913	39.73	7.011	5.589	1.115	.7195
Stddev	.04	.02	.007	.07	.003	.08	.007	.013	.002	.0008
%RSD	.2883	.1582	.3335	.5333	.0431	.2014	.0937	.2326	.1539	.1079
#1	13.65	14.25	2.200	12.24	5.916	39.81	7.019	5.581	1.117	.7203
#2	13.64	14.21	2.200	12.37	5.911	39.65	7.009	5.604	1.114	.7194
#3	13.71	14.26	2.213	12.33	5.914	39.73	7.006	5.583	1.114	.7188

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.823	2.320	82.22	8.063	2.450	2.860	14.70
Stddev	.002	.004	.36	.062	.004	.002	.02
%RSD	.0847	.1539	.4348	.7674	.1737	.0779	.1295
#1	1.824	2.324	81.91	8.037	2.448	2.858	14.72
#2	1.822	2.320	82.61	8.134	2.454	2.862	14.71
#3	1.822	2.317	82.15	8.019	2.447	2.859	14.68

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2237.3	5954.4	46786.	3899.3
Stddev	5.6	2.2	117.	14.1
%RSD	.24865	.03636	.25093	.36046
#1	2243.6	5956.4	46838.	3915.5
#2	2233.2	5954.8	46652.	3890.4
#3	2235.0	5952.1	46869.	3892.0

Zoom In Zoom Out

Sample Name: HSTD Acquired: 5/18/2016 9:56:09 Type: QC
Method: 60102007_041712(v127) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4975	80.47	3.993	3.987	3.993	80.06	3.971	3.974	4.005	4.002
Stddev	.0022	.11	.004	.004	.007	.07	.001	.002	.006	.003
%RSD	.4436	.1385	.0944	.1066	.1744	.0828	.0202	.0530	.1441	.0810
#1	.4990	80.60	3.989	3.991	4.001	80.13	3.972	3.973	4.012	3.999
#2	.4985	80.42	3.992	3.985	3.988	80.06	3.970	3.973	4.004	4.005
#3	.4949	80.40	3.997	3.984	3.990	79.99	3.971	3.977	4.000	4.003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	77.69	79.98	79.50	3.943	3.985	79.59	3.959	4.026	4.002	3.985
Stddev	.11	.13	.15	.034	.001	.08	.002	.006	.007	.009
%RSD	.1358	.1611	.1844	.8506	.0143	.1021	.0598	.1442	.1780	.2357
#1	77.75	80.00	79.64	3.982	3.985	79.67	3.961	4.033	3.994	3.975
#2	77.75	80.09	79.52	3.928	3.984	79.59	3.957	4.022	4.002	3.988
#3	77.56	79.84	79.35	3.920	3.985	79.51	3.961	4.024	4.008	3.993
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.937	3.927	3.961	3.944	3.997	3.974	3.971
Stddev	.004	.003	.063	.030	.003	.003	.004
%RSD	.1101	.0859	1.592	.7513	.0616	.0637	.0911
#1	3.932	3.929	3.989	3.978	3.998	3.977	3.975
#2	3.937	3.923	4.006	3.921	3.994	3.974	3.968
#3	3.940	3.928	3.889	3.934	3.998	3.972	3.970
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: HSTD Acquired: 5/18/2016 9:56:09 Type: QC
Method: 60102007_041712(v127) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2235.3	5948.2	46757.	3904.8
Stddev	4.7	9.8	174.	22.0
%RSD	.20877	.16545	.37308	.56467
#1	2230.0	5937.3	46561.	3914.8
#2	2237.7	5950.8	46895.	3879.5
#3	2238.4	5956.4	46814.	3920.1

Zoom In Zoom Out

Sample Name: ICV Acquired: 5/18/2016 10:01:55 Type: QC
Method: 60102007_041712(v127) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2483	41.84	2.026	2.115	2.094	42.69	2.053	2.074	2.063	2.035
Stddev	.0005	.23	.004	.008	.011	.23	.001	.001	.005	.007
%RSD	.2096	.5539	.2099	.3684	.5122	.5309	.0334	.0512	.2294	.3609
#1	.2481	42.10	2.026	2.124	2.106	42.95	2.053	2.074	2.068	2.033
#2	.2489	41.72	2.021	2.111	2.088	42.59	2.052	2.073	2.063	2.043
#3	.2480	41.68	2.030	2.111	2.087	42.53	2.054	2.075	2.058	2.029
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.30	42.37	43.08	2.104	1.919	42.76	2.085	2.035	2.048	2.066
Stddev	.20	.20	.25	.004	.003	.27	.002	.001	.003	.004
%RSD	.4887	.4811	.5822	.1758	.1659	.6383	.0769	.0520	.1197	.2022
#1	41.52	42.60	43.29	2.109	1.916	43.07	2.084	2.035	2.048	2.068
#2	41.22	42.30	43.15	2.101	1.920	42.63	2.086	2.037	2.045	2.061
#3	41.14	42.22	42.80	2.103	1.922	42.57	2.087	2.035	2.050	2.068
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0811	2.056	1.991	1.963	2.118	1.920	2.074
Stddev	.0008	.004	.012	.001	.004	.004	.001
%RSD	.9850	.2091	.6093	.0629	.1951	.2300	.0243
#1	.0820	2.052	2.005	1.964	2.113	1.924	2.073
#2	.0804	2.055	1.984	1.964	2.119	1.921	2.074
#3	.0808	2.060	1.985	1.962	2.121	1.915	2.074
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: ICV Acquired: 5/18/2016 10:01:55 Type: QC
Method: 60102007_041712(v127) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2384.6	6098.0	47730.	3911.4
Stddev	3.8	6.6	68.	29.1
%RSD	.16071	.10816	.14261	.74343
#1	2388.0	6105.2	47678.	3894.8
#2	2380.5	6092.4	47807.	3894.4
#3	2385.4	6096.3	47706.	3945.0

Zoom In Zoom Out

Sample Name: ICB Acquired: 5/18/2016 10:10:28 Type: QC
Method: 60102007_041712(v127) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	-.0023	-.0006	-.0005	-.0004	-.0121	-.0002	-.0002	-.0002	-.0003
Stddev	.0003	.0072	.0005	.0003	.0000	.0020	.0000	.0001	.0001	.0001
%RSD	62.96	315.2	70.85	47.30	10.58	16.37	6.305	30.28	66.06	57.04
#1	.0008	.0053	-.0002	-.0004	-.0004	-.0140	-.0002	-.0002	-.0001	-.0004
#2	.0002	-.0090	-.0011	-.0008	-.0003	-.0122	-.0002	-.0001	-.0001	-.0002
#3	.0003	-.0032	-.0007	-.0004	-.0004	-.0100	-.0002	-.0002	-.0003	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0097	.0342	.0245	-.0003	-.0006	.0031	-.0001	.0000	-.0018	-.0001
Stddev	.0040	.0232	.0210	.0000	.0001	.0048	.0001	.0009	.0004	.0007
%RSD	41.28	67.86	85.52	7.363	22.55	155.0	89.63	3856.	21.32	1264.
#1	-.0108	.0610	.0290	-.0003	-.0005	-.0024	.0000	.0005	-.0015	-.0008
#2	-.0131	.0220	.0430	-.0003	-.0006	.0059	-.0002	-.0010	-.0016	-.0001
#3	-.0053	.0197	.0017	-.0003	-.0007	.0057	-.0001	.0006	-.0022	.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0025	-.0001	-.0004	-.0006	-.0001	-.0002	-.0004
Stddev	.0004	.0002	.0001	.0000	.0009	.0002	.0000
%RSD	16.67	141.9	27.56	1.670	1221.	99.76	10.81
#1	-.0026	.0001	-.0006	-.0006	-.0002	-.0004	-.0003
#2	-.0028	-.0003	-.0004	-.0005	.0009	-.0002	-.0004
#3	-.0020	-.0002	-.0004	-.0005	-.0009	.0000	-.0004
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: ICB Acquired: 5/18/2016 10:10:28 Type: QC
Method: 60102007_041712(v127) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2803.5	6398.3	50984.	4028.5
Stddev	8.7	12.6	95.	15.7
%RSD	.31200	.19673	.18553	.39089
#1	2813.1	6409.0	51026.	4020.4
#2	2795.9	6384.4	50875.	4046.6
#3	2801.5	6401.4	51050.	4018.4

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/18/2016 10:14:13 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0093	.2150	.0097	.2064	.0046	1.025	.0051	.0528	.0101	.0261
Stddev	.0006	.0091	.0008	.0010	.0001	.008	.0000	.0001	.0001	.0004
%RSD	6.439	4.243	8.398	.4703	1.284	.8165	.8060	.1048	1.414	1.401
#1	.0090	.2245	.0088	.2075	.0045	1.031	.0051	.0527	.0099	.0265
#2	.0088	.2063	.0102	.2061	.0046	1.015	.0050	.0528	.0102	.0260
#3	.0099	.2143	.0102	.2056	.0045	1.028	.0051	.0528	.0101	.0258
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2898	10.12	5.234	.0156	.0475	10.11	.0426	.0041	.0094	.0508
Stddev	.0062	.04	.053	.0000	.0001	.01	.0001	.0008	.0021	.0005
%RSD	2.144	.3695	1.007	.2499	.2724	.0944	.2757	18.34	22.35	1.026
#1	.2970	10.16	5.242	.0156	.0476	10.12	.0426	.0048	.0110	.0504
#2	.2860	10.08	5.282	.0156	.0473	10.12	.0427	.0042	.0070	.0514
#3	.2865	10.12	5.178	.0156	.0475	10.10	.0425	.0033	.0101	.0505
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Value										
Range										

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0522	.0096	.0093	.0099	.0477	.0211
Stddev	.0003	.0001	.0001	.0008	.0002	.0000
%RSD	.5105	.9405	.9751	7.906	.5216	.2022
#1	.0519	.0096	.0094	.0098	.0479	.0211
#2	.0524	.0096	.0092	.0092	.0477	.0211
#3	.0523	.0095	.0093	.0107	.0474	.0212
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/18/2016 10:14:13 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2717.3	6432.1	50704.	4049.4
Stddev	6.2	7.6	226.	18.3
%RSD	.22700	.11866	.44490	.45177
#1	2724.4	6439.8	50722.	4069.0
#2	2714.5	6432.0	50469.	4032.9
#3	2713.0	6424.6	50919.	4046.3

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Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/18/2016 10:17:54 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Pb2203
Units	ppm
Avg	.0047
Stddev	.0005
%RSD	10.53
#1	.0042
#2	.0051
#3	.0050
Check ?	Chk Pass
Value	
Range	

Int. Std.	In2306
Units	Cts/S
Avg	2657.9
Stddev	2.0
%RSD	.07621
#1	2655.6
#2	2659.2
#3	2659.0

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/18/2016 10:25:17 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	488.0	.0000	-.0002	-.0005	461.1	.0000	-.0005	.0007	.0000
Stddev	.0004	7.9	.001	.0001	.0000	7.4	.0001	.0001	.0001	.000
%RSD	183.7	1.610	15750.	44.71	8.454	1.601	591.5	27.63	10.50	3033.
#1	-.0001	497.0	-.0008	-.0001	-.0004	463.6	-.0001	-.0006	.0008	.0002
#2	.0001	482.9	.0009	-.0001	-.0004	466.9	.0000	-.0004	.0006	-.0001
#3	-.0006	484.0	-.0001	-.0003	-.0005	452.8	.0001	-.0005	.0007	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	180.2	.1321	502.7	.0000	-.0010	.2221	.0000	.0001	.0000	.0000
Stddev	.9	.0210	1.8	.000	.0003	.0178	.000	.0035	.0003	.001
%RSD	.5161	15.90	.3623	308.4	30.59	8.004	895.8	6651.	795.9	1903.
#1	181.1	.1101	504.7	-.0001	-.0007	.2055	.0001	-.0040	.0002	.0008
#2	180.2	.1343	502.1	.0000	-.0013	.2199	.0000	.0018	-.0003	-.0002
#3	179.3	.1519	501.3	.0000	-.0010	.2409	-.0001	.0023	.0002	-.0007
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0137	-.0005	.0001	-.0008	.0018	.0004	-.0016
Stddev	.0005	.0005	.0001	.0000	.0009	.0004	.0001
%RSD	3.621	96.83	172.9	3.043	49.84	104.6	7.924
#1	.0131	-.0007	.0001	-.0008	.0028	.0000	-.0017
#2	.0137	-.0009	-.0001	-.0008	.0016	.0008	-.0016
#3	.0141	.0001	.0002	-.0008	.0010	.0004	-.0015
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/18/2016 10:25:17 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2191.7	5725.0	43558.	3873.5
Stddev	3.5	7.4	114.	24.5
%RSD	.15787	.12854	.26237	.63370
#1	2195.6	5730.4	43605.	3845.6
#2	2189.2	5728.1	43427.	3891.9
#3	2190.2	5716.6	43641.	3882.9

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 5/18/2016 10:33:39 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9744	463.3	1.083	.5202	.4926	451.1	.9535	.4776	.4952	.5246
Stddev	.0016	5.7	.002	.0081	.0087	10.1	.0006	.0007	.0005	.0013
%RSD	.1623	1.231	.1889	1.560	1.765	2.234	.0669	.1493	.1015	.2392
#1	.9742	468.7	1.083	.5288	.5024	462.7	.9537	.4783	.4957	.5258
#2	.9761	463.7	1.086	.5128	.4858	445.8	.9540	.4777	.4947	.5247
#3	.9730	457.3	1.082	.5189	.4896	444.8	.9527	.4769	.4953	.5233
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	177.8	.1971	493.9	.5030	.9146	.2711	.9742	.9376	1.009	1.016
Stddev	3.1	.0091	8.0	.0007	.0005	.0086	.0012	.0038	.002	.002
%RSD	1.748	4.631	1.624	.1345	.0513	3.184	.1187	.4092	.1967	.2031
#1	181.3	.1871	503.0	.5033	.9141	.2715	.9754	.9332	1.011	1.017
#2	175.2	.1993	487.7	.5022	.9151	.2622	.9742	.9393	1.008	1.018
#3	177.0	.2050	491.1	.5035	.9146	.2794	.9731	.9403	1.007	1.014
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0707	.9309	.9714	.9585	.9358	.4634	.9536
Stddev	.0005	.0014	.0156	.0012	.0050	.0010	.0003
%RSD	.6846	.1537	1.605	.1256	.5395	.2100	.0304
#1	.0702	.9320	.9886	.9599	.9300	.4644	.9538
#2	.0712	.9315	.9582	.9575	.9390	.4625	.9538
#3	.0708	.9293	.9674	.9582	.9385	.4632	.9533
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

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Zoom In Zoom Out

Sample Name: ICSAB Acquired: 5/18/2016 10:33:39 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2190.8	5735.7	44624.	3909.0
Stddev	4.0	4.4	144.	49.2
%RSD	.18376	.07603	.32201	1.2596
#1	2195.0	5739.8	44701.	3854.5
#2	2187.0	5731.1	44713.	3950.2
#3	2190.4	5736.2	44458.	3922.2

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/18/2016 10:41:21 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2432	38.17	2.000	1.967	1.931	38.49	1.968	1.972	1.891	1.930
Stddev	.0009	.05	.006	.004	.007	.10	.000	.001	.003	.005
%RSD	.3759	.1300	.2889	.1766	.3735	.2539	.0209	.0466	.1548	.2595
#1	.2442	38.21	1.993	1.970	1.935	38.58	1.968	1.971	1.894	1.928
#2	.2425	38.18	2.003	1.968	1.935	38.52	1.968	1.973	1.890	1.926
#3	.2429	38.11	2.002	1.963	1.922	38.39	1.969	1.972	1.889	1.935
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.25	39.12	39.25	1.969	1.984	38.19	2.009	1.902	1.986	1.992
Stddev	.08	.11	.07	.005	.006	.08	.003	.004	.002	.006
%RSD	.2100	.2862	.1670	.2624	.3074	.2048	.1588	.2173	.0832	.2831
#1	40.31	39.23	39.31	1.975	1.978	38.27	2.005	1.905	1.984	1.985
#2	40.28	39.12	39.24	1.969	1.987	38.20	2.011	1.897	1.986	1.994
#3	40.15	39.00	39.18	1.964	1.989	38.11	2.011	1.903	1.987	1.995
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.062	2.060	1.954	1.948	1.931	1.967	1.969
Stddev	.004	.004	.004	.002	.005	.002	.001
%RSD	.1787	.2114	.2169	.1189	.2847	.0754	.0282
#1	2.058	2.055	1.956	1.951	1.932	1.969	1.969
#2	2.063	2.063	1.957	1.948	1.925	1.966	1.970
#3	2.066	2.062	1.949	1.946	1.936	1.966	1.968
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/18/2016 10:41:21 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2432.3	6121.0	49590.	4051.3
Stddev	6.1	8.8	217.	25.2
%RSD	.25049	.14338	.43755	.62145
#1	2429.8	6128.5	49354.	4022.6
#2	2439.2	6123.2	49635.	4061.8
#3	2427.8	6111.3	49781.	4069.5

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/18/2016 11:00:17 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0007	-.0076	-.0008	-.0007	-.0004	-.0193	-.0002	-.0001
Stddev	.0004	.0180	.0005	.0001	.0000	.0021	.0000	.0000
%RSD	48.35	237.7	66.43	16.68	8.776	10.90	13.32	64.24
#1	.0005	-.0003	-.0002	-.0008	-.0004	-.0210	-.0002	.0000
#2	.0006	-.0281	-.0011	-.0006	-.0004	-.0199	-.0002	-.0001
#3	.0011	.0057	-.0012	-.0006	-.0004	-.0169	-.0001	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0003	-.0194	.0034	.0080	-.0004	F-.0016	.0200
Stddev	.0001	.0001	.0015	.0074	.0070	.0000	.0000	.0036
%RSD	18.95	48.18	7.732	217.9	87.73	10.91	2.205	17.94
#1	-.0004	.0003	-.0210	.0009	.0142	-.0004	-.0017	.0228
#2	-.0002	.0002	-.0181	-.0024	.0004	-.0004	-.0016	.0211
#3	-.0003	.0004	-.0191	.0116	.0095	-.0003	-.0017	.0159
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit							.0010	
Low Limit							-.0010	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	-.0006	F-.0030	-.0004	-.0023	-.0002	-.0004	-.0011
Stddev	.0001	.0007	.0009	.0009	.0004	.0001	.0001	.0001
%RSD	37.91	113.9	29.76	223.3	17.36	60.15	30.70	5.918
#1	-.0002	-.0013	-.0038	.0002	-.0027	-.0002	-.0004	-.0012
#2	-.0002	.0001	-.0031	.0001	-.0019	-.0001	-.0003	-.0010
#3	-.0001	-.0007	-.0020	-.0015	-.0023	-.0003	-.0005	-.0011
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit			.0020					
Low Limit			-.0020					

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/18/2016 11:00:17 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	.0000	-.0003	-.0004
Stddev	.000	.0001	.0000
%RSD	644.9	22.45	10.30
#1	.0002	-.0002	-.0004
#2	-.0004	-.0003	-.0004
#3	.0001	-.0002	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2781.8	6195.8	51795.	4041.7
Stddev	4.6	7.4	268.	44.5
%RSD	.16697	.11961	.51732	1.1001
#1	2784.8	6193.1	51707.	4069.5
#2	2776.5	6190.0	52096.	4065.2
#3	2784.2	6204.1	51583.	3990.4

Zoom In Zoom Out

Sample Name: FA33973-1 Acquired: 5/18/2016 11:06:03 Type: Unk
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0097	181.2	.1212	1.794	.0402	110.4	.0066	.1367	.2046	.3230
Stddev	.0015	.4	.0041	.004	.0010	.2	.0003	.0005	.0008	.0005
%RSD	15.44	.2406	3.406	.2227	2.377	.2181	4.574	.3777	.4000	.1648
#1	.0113	181.5	.1188	1.792	.0394	110.6	.0066	.1367	.2053	.3224
#2	.0093	181.3	.1259	1.799	.0413	110.5	.0068	.1361	.2037	.3230
#3	.0084	180.7	.1188	1.791	.0400	110.1	.0062	.1372	.2049	.3235

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	409.4	61.96	54.90	7.167	-.0040	1.910	.2205	.4033	-.0265	-.0146
Stddev	.5	.22	.05	.009	.0012	.008	.0011	.0076	.0063	.0069
%RSD	.1200	.3518	.0838	.1293	30.63	.4267	.4972	1.872	23.65	47.29
#1	409.2	62.21	54.94	7.175	-.0041	1.918	.2211	.3965	-.0212	-.0220
#2	409.0	61.85	54.85	7.168	-.0051	1.909	.2211	.4019	-.0248	-.0137
#3	409.9	61.81	54.90	7.157	-.0027	1.902	.2192	.4114	-.0334	-.0082

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	11.18	.0350	.5499	7.017	.0002	.4146	1.438
Stddev	.01	.0009	.0018	.004	.0049	.0034	.003
%RSD	.1065	2.681	.3294	.0622	3078.	.8128	.2022
#1	11.19	.0360	.5502	7.018	-.0052	.4184	1.437
#2	11.19	.0350	.5516	7.022	.0045	.4129	1.437
#3	11.17	.0341	.5480	7.013	.0012	.4123	1.442

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2647.8	7335.3	59969.	4781.8
Stddev	10.1	10.5	221.	47.8
%RSD	.38216	.14328	.36877	.99998
#1	2659.5	7347.2	59724.	4733.6
#2	2642.3	7331.4	60152.	4829.2
#3	2641.5	7327.3	60032.	4782.6

Zoom In Zoom Out

Sample Name: MP30364-D1 Acquired: 5/18/2016 11:10:06 Type: Unk
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0079	148.4	.1050	1.393	.0333	86.60	.0046	.1153	.1737	.2483
Stddev	.0022	1.0	.0021	.010	.0010	.44	.0008	.0003	.0038	.0026
%RSD	28.36	.6461	1.955	.7308	2.997	.5134	17.22	.3004	2.185	1.067
#1	.0053	147.3	.1047	1.381	.0337	86.13	.0055	.1149	.1714	.2456
#2	.0091	149.0	.1031	1.401	.0340	87.02	.0040	.1155	.1717	.2509
#3	.0093	148.9	.1072	1.396	.0321	86.65	.0042	.1156	.1781	.2483

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	358.4	51.78	48.33	5.474	-.0062	1.164	.1888	.2993	-.0313	-.0040
Stddev	1.9	.30	.26	.010	.0006	.058	.0014	.0055	.0077	.0053
%RSD	.5403	.5872	.5322	.1811	9.306	4.956	.7340	1.842	24.51	132.5
#1	356.4	51.55	48.05	5.464	-.0056	1.105	.1877	.3014	-.0257	-.0065
#2	360.2	52.13	48.56	5.476	-.0067	1.220	.1904	.3035	-.0282	-.0075
#3	358.7	51.67	48.37	5.483	-.0063	1.168	.1883	.2930	-.0400	.0021

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	10.16	.0276	.4282	5.965	-.0036	.3329	1.162
Stddev	.01	.0003	.0012	.010	.0026	.0020	.001
%RSD	.1277	.9134	.2766	.1735	73.40	.5953	.1201
#1	10.15	.0279	.4268	5.953	-.0010	.3346	1.162
#2	10.15	.0274	.4292	5.973	-.0062	.3333	1.164
#3	10.17	.0276	.4285	5.968	-.0035	.3307	1.162

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2667.0	7256.2	59027.	4701.1
Stddev	6.2	10.7	248.	42.0
%RSD	.23300	.14714	.41988	.89341
#1	2665.0	7266.1	59052.	4749.0
#2	2662.0	7244.9	59262.	4670.5
#3	2673.9	7257.7	58768.	4683.8

Zoom In Zoom Out

Sample Name: MP30364-S1 Acquired: 5/18/2016 11:14:09 Type: Unk
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0565	225.0	1.963	3.714	.0883	126.0	.0532	.6243	.3883	.5543
Stddev	.0048	.2	.004	.016	.0007	.1	.0003	.0006	.0025	.0026
%RSD	8.563	.0717	.2039	.4188	.8291	.1088	.5821	.0980	.6392	.4709
#1	.0546	225.0	1.964	3.697	.0879	125.9	.0529	.6247	.3902	.5531
#2	.0620	225.2	1.966	3.723	.0878	126.1	.0535	.6236	.3855	.5525
#3	.0529	224.9	1.958	3.724	.0891	125.9	.0532	.6245	.3892	.5573

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	431.3	85.07	79.04	7.588	.3685	23.96	.7186	.9180	.1072	1.854
Stddev	2.5	.19	.52	.016	.0011	.08	.0010	.0056	.0148	.011
%RSD	.5849	.2283	.6595	.2142	.2990	.3336	.1393	.6070	13.76	.5791
#1	428.5	85.29	78.62	7.582	.3674	24.03	.7175	.9130	.1149	1.863
#2	432.4	84.93	79.62	7.606	.3686	23.98	.7193	.9240	.0902	1.842
#3	433.2	84.99	78.87	7.576	.3696	23.87	.7191	.9172	.1165	1.855

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	10.29	.5027	.9802	7.678	2.140	.8404	1.863
Stddev	.01	.0014	.0008	.019	.006	.0010	.001
%RSD	.0538	.2771	.0798	.2474	.2612	.1174	.0676
#1	10.28	.5025	.9795	7.668	2.134	.8410	1.862
#2	10.29	.5042	.9801	7.700	2.139	.8392	1.863
#3	10.29	.5014	.9811	7.667	2.146	.8408	1.864

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2672.8	7497.1	60969.	4889.2
Stddev	3.1	4.4	159.	24.4
%RSD	.11598	.05859	.26100	.49824
#1	2671.2	7496.3	60873.	4906.3
#2	2676.4	7501.8	60881.	4861.3
#3	2670.9	7493.1	61152.	4900.0

Zoom In Zoom Out

Sample Name: MP30364-S2 Acquired: 5/18/2016 11:18:07 Type: Unk
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0496	203.1	1.874	3.462	.0811	117.6	.0504	.5747	.3522	.5073
Stddev	.0031	.4	.004	.003	.0005	.2	.0003	.0019	.0006	.0034
%RSD	6.157	.2067	.2061	.0921	.6576	.1722	.5940	.3259	.1740	.6611
#1	.0469	203.5	1.870	3.466	.0817	117.6	.0505	.5730	.3526	.5107
#2	.0490	203.1	1.878	3.461	.0809	117.8	.0501	.5745	.3515	.5040
#3	.0529	202.6	1.873	3.460	.0807	117.4	.0507	.5767	.3525	.5073

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	399.4	76.90	73.51	6.800	.3542	22.80	.6593	.8348	.1176	1.766
Stddev	.9	.39	.34	.005	.0007	.04	.0022	.0022	.0073	.006
%RSD	.2160	.5095	.4638	.0772	.2017	.1788	.3306	.2591	6.208	.3330
#1	398.4	77.29	73.69	6.806	.3534	22.75	.6591	.8358	.1220	1.771
#2	399.7	76.51	73.72	6.796	.3542	22.82	.6573	.8362	.1092	1.759
#3	400.1	76.89	73.12	6.799	.3548	22.82	.6616	.8323	.1217	1.766

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	9.984	.4767	.9160	6.970	1.992	.7726	1.769
Stddev	.008	.0027	.0027	.004	.009	.0033	.002
%RSD	.0771	.5723	.2922	.0571	.4689	.4302	.1290
#1	9.977	.4738	.9178	6.974	1.994	.7764	1.766
#2	9.984	.4771	.9174	6.966	2.000	.7700	1.769
#3	9.992	.4792	.9129	6.970	1.982	.7716	1.771

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2622.9	7168.3	58064.	4630.5
Stddev	1.9	13.0	13.	15.7
%RSD	.07162	.18159	.02323	.33853
#1	2624.5	7179.6	58067.	4647.7
#2	2623.3	7171.3	58049.	4626.9
#3	2620.8	7154.1	58075.	4617.0

Zoom In Zoom Out

Sample Name: MP30364-PS1 Acquired: 5/18/2016 11:22:05 Type: Unk
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0545	178.2	.2152	1.973	.0842	111.6	.0527	.1796	.2437	.4058
Stddev	.0022	1.1	.0030	.010	.0010	.4	.0003	.0009	.0039	.0026
%RSD	4.048	.6390	1.384	.4996	1.188	.4005	.6378	.4900	1.602	.6499
#1	.0531	178.7	.2165	1.976	.0848	112.1	.0530	.1793	.2463	.4078
#2	.0534	179.0	.2173	1.982	.0847	111.6	.0528	.1790	.2392	.4028
#3	.0571	176.9	.2118	1.962	.0830	111.2	.0524	.1806	.2455	.4068

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	396.8	68.38	57.10	6.935	.0868	10.47	.3087	.4330	.0684	.0879
Stddev	.9	.62	.21	.004	.0009	.07	.0007	.0041	.0120	.0066
%RSD	.2302	.9085	.3752	.0556	1.022	.6354	.2303	.9544	17.62	7.460
#1	397.1	68.36	57.28	6.932	.0861	10.39	.3080	.4338	.0589	.0827
#2	397.5	69.01	57.15	6.933	.0865	10.50	.3089	.4285	.0642	.0857
#3	395.8	67.77	56.86	6.939	.0878	10.51	.3094	.4366	.0819	.0952

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	11.10	.0783	.5764	6.943	.1019	.4395	1.641
Stddev	.02	.0023	.0007	.007	.0019	.0011	.004
%RSD	.1797	2.916	.1213	.1077	1.901	.2419	.2121
#1	11.09	.0775	.5762	6.935	.1007	.4392	1.640
#2	11.09	.0765	.5772	6.944	.1042	.4386	1.638
#3	11.12	.0809	.5758	6.950	.1009	.4406	1.645

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2638.2	7300.0	59153.	4757.7
Stddev	7.1	21.9	234.	26.5
%RSD	.26802	.29932	.39588	.55798
#1	2639.6	7312.2	59090.	4744.6
#2	2644.5	7313.0	59412.	4740.2
#3	2630.5	7274.7	58957.	4788.2

Zoom In Zoom Out

Sample Name: MP30364-SD1 Acquired: 5/18/2016 11:26:07 Type: Unk
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 50.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0447	194.6	.0846	1.874	.0212	117.5	-.0030	.1396	.2186	.3426
Stddev	.0205	.6	.0407	.005	.0043	.4	.0016	.0033	.0061	.0187
%RSD	45.94	.3294	48.05	.2672	20.24	.3410	54.34	2.374	2.785	5.449
#1	.0684	194.2	.1315	1.877	.0164	117.8	-.0013	.1358	.2156	.3376
#2	.0316	194.3	.0584	1.877	.0228	117.0	-.0031	.1419	.2146	.3632
#3	.0341	195.3	.0640	1.868	.0246	117.6	-.0046	.1411	.2256	.3269

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	438.5	65.31	58.21	7.626	-.0763	2.162	.2265	.3101	-.1521	-.0390
Stddev	1.2	1.80	.47	.014	.0032	.232	.0017	.0187	.0317	.0136
%RSD	.2704	2.764	.8139	.1850	4.200	10.73	.7446	6.030	20.82	34.88
#1	439.9	66.62	58.66	7.642	-.0754	2.109	.2261	.3256	-.1771	-.0470
#2	438.2	66.07	57.72	7.618	-.0736	1.961	.2284	.2894	-.1165	-.0233
#3	437.6	63.25	58.24	7.618	-.0798	2.416	.2251	.3153	-.1626	-.0466

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	15.47	.0016	.5625	7.538	-.0207	.4056	1.734
Stddev	.26	.0109	.0069	.032	.0337	.0017	.004
%RSD	1.681	695.6	1.227	.4228	162.6	.4189	.2582
#1	15.22	.0009	.5545	7.511	.0101	.4052	1.736
#2	15.46	.0127	.5668	7.573	-.0567	.4041	1.729
#3	15.74	-.0090	.5661	7.530	-.0156	.4075	1.738

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2781.3	6608.8	53706.	4229.3
Stddev	5.7	7.1	204.	8.2
%RSD	.20634	.10790	.37896	.19500
#1	2787.8	6615.2	53479.	4219.9
#2	2779.2	6610.1	53871.	4232.4
#3	2777.0	6601.1	53768.	4235.5

Zoom In Zoom Out

Sample Name: FA33973-2 Acquired: 5/18/2016 11:30:11 Type: Unk
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0144	179.5	.4166	2.225	.0352	654.0	.0291	.2156	.2986	.7100
Stddev	.0024	1.2	.0076	.011	.0003	3.4	.0005	.0006	.0002	.0048
%RSD	16.74	.6937	1.834	.5063	.9339	.5222	1.673	.2631	.0753	.6692
#1	.0143	179.2	.4091	2.216	.0351	654.0	.0296	.2150	.2987	.7122
#2	.0120	178.4	.4162	2.220	.0350	650.6	.0287	.2156	.2988	.7131
#3	.0168	180.8	.4244	2.237	.0356	657.4	.0289	.2162	.2984	.7045

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	462.8	74.77	85.89	14.42	.0222	2.933	.3370	.9204	-.0277	-.0094
Stddev	3.0	.45	.43	.01	.0014	.083	.0007	.0085	.0073	.0114
%RSD	.6382	.6081	.4970	.0930	6.127	2.828	.1959	.9199	26.21	121.3
#1	460.6	74.74	85.69	14.41	.0206	2.898	.3371	.9170	-.0339	-.0158
#2	461.7	74.33	85.59	14.41	.0230	2.874	.3375	.9301	-.0197	.0038
#3	466.2	75.24	86.38	14.43	.0230	3.028	.3362	.9142	-.0295	-.0161

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	7.899	.0484	.7373	8.915	.0067	.5225	7.467
Stddev	.008	.0007	.0035	.005	.0054	.0030	.010
%RSD	.1040	1.348	.4720	.0593	80.57	.5810	.1399
#1	7.890	.0492	.7382	8.914	.0021	.5190	7.455
#2	7.899	.0479	.7334	8.910	.0055	.5237	7.472
#3	7.907	.0482	.7402	8.921	.0127	.5247	7.475

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2549.6	7537.8	60283.	4893.3
Stddev	3.5	11.4	217.	35.5
%RSD	.13790	.15154	.35970	.72597
#1	2550.2	7550.1	60332.	4900.4
#2	2545.9	7527.4	60472.	4924.7
#3	2552.8	7536.1	60046.	4854.8

Zoom In Zoom Out

Sample Name: FA33859-3 Acquired: 5/18/2016 11:34:14 Type: Unk
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 20.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	.0130	.2454	.0075	-.0012	-.0090	6.811	-.0031	-.0021
Stddev	.0099	.1256	.0059	.0028	.0017	.034	.0003	.0019
%RSD	76.01	51.19	77.81	224.9	19.05	.4972	9.759	92.81
#1	.0046	.1317	.0077	-.0036	-.0087	6.785	-.0034	-.0043
#2	.0239	.3802	.0016	.0018	-.0109	6.799	-.0031	-.0013
#3	.0104	.2242	.0133	-.0019	-.0075	6.849	-.0028	-.0006

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	.0749	F179.7	1.276	20.65	5.999	.0203	-.0379	4.163
Stddev	.0029	.7	.136	.37	.352	.0011	.0031	.123
%RSD	3.874	.3783	10.66	1.793	5.863	5.305	8.082	2.949
#1	.0782	180.0	1.433	20.27	5.678	.0209	-.0362	4.022
#2	.0727	178.9	1.199	21.01	6.375	.0209	-.0414	4.246
#3	.0738	180.1	1.197	20.68	5.943	.0190	-.0361	4.222

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.0669	F-.1451	-.0466	-.0112	.4779	-.0056	.0509	-.0056
Stddev	.0046	.0113	.0180	.0175	.0047	.0023	.0012	.0018
%RSD	6.895	7.799	38.61	155.5	.9840	40.41	2.342	31.40
#1	.0699	-.1320	-.0574	-.0312	.4728	-.0081	.0521	-.0043
#2	.0692	-.1512	-.0258	-.0036	.4821	-.0049	.0508	-.0076
#3	.0616	-.1520	-.0566	.0011	.4789	-.0037	.0497	-.0049

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0060	-.0091	.2933
Stddev	.0125	.0045	.0017
%RSD	207.0	48.90	.5704
#1	-.0203	-.0127	.2914
#2	-.0007	-.0041	.2947
#3	.0029	-.0107	.2938

Zoom In Zoom Out

Sample Name: FA33859-3 Acquired: 5/18/2016 11:34:14 Type: Unk
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 20.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2794.9	6253.5	51581.	4125.2
Stddev	7.9	17.7	160.	12.9
%RSD	.28361	.28352	.30922	.31355
#1	2798.8	6273.0	51410.	4136.6
#2	2800.1	6249.3	51725.	4127.9
#3	2785.8	6238.3	51608.	4111.2

Zoom In Zoom Out

Sample Name: FA33859-4 Acquired: 5/18/2016 11:38:30 Type: Unk
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 50.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0197	-.0674	.0002	-.0179	-.0275	9.387	-.0096	-.0082	.1009
Stddev	.0146	.7265	.0132	.0060	.0010	.027	.0022	.0048	.0121
%RSD	73.93	1078.	5659.	33.24	3.812	.2848	22.90	58.40	11.99
#1	.0283	.5905	-.0124	-.0191	-.0287	9.364	-.0115	-.0071	.1127
#2	.0029	.0544	.0139	-.0232	-.0268	9.382	-.0100	-.0040	.0886
#3	.0281	-.8471	-.0008	-.0115	-.0270	9.416	-.0072	-.0134	.1015

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	F261.5	.7088	31.06	7.861	.0164	-.0921	17.55	.0898	-.2435
Stddev	.7	.1096	1.56	1.189	.0013	.0045	.36	.0098	.0040
%RSD	.2596	15.46	5.033	15.13	8.217	4.862	2.050	10.87	1.636
#1	260.8	.8261	29.80	7.206	.0173	-.0972	17.86	.0842	-.2447
#2	262.1	.6909	30.56	9.233	.0149	-.0907	17.64	.1011	-.2391
#3	261.7	.6092	32.81	7.143	.0170	-.0886	17.16	.0840	-.2468

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.1768	-.0094	.4406	-.0231	.0463	-.0428	.0031	-.0231	.6972
Stddev	.0025	.0896	.0111	.0036	.0012	.0037	.0176	.0126	.0010
%RSD	1.436	948.8	2.527	15.55	2.653	8.730	568.8	54.43	.1481
#1	-.1740	-.0638	.4319	-.0272	.0450	-.0391	-.0011	-.0364	.6963
#2	-.1788	-.0586	.4531	-.0204	.0465	-.0466	.0224	-.0114	.6970
#3	-.1776	.0940	.4367	-.0217	.0474	-.0427	-.0121	-.0214	.6984

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2776.1	6275.8	51166.	4005.8
Stddev	3.5	3.8	117.	23.0
%RSD	.12636	.06083	.22957	.57363
#1	2779.5	6280.0	51040.	4001.2
#2	2772.5	6274.9	51187.	4030.7
#3	2776.2	6272.5	51272.	3985.4

Zoom In Zoom Out

Sample Name: FA33859-5 Acquired: 5/18/2016 11:42:37 Type: Unk
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0123	.6289	1.274	.0235	-.0027	2.702	-.0019	.0008	.4540
Stddev	.0011	.0628	.007	.0002	.0006	.035	.0001	.0004	.0017
%RSD	9.251	9.984	.5615	.7696	23.44	1.279	4.145	48.66	.3672
#1	.0118	.6850	1.282	.0235	-.0024	2.707	-.0019	.0004	.4558
#2	.0136	.6407	1.270	.0236	-.0034	2.666	-.0020	.0011	.4526
#3	.0116	.5610	1.270	.0233	-.0023	2.734	-.0018	.0010	.4534

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.1023	4.044	F8197.	.7143	.0781	.0209	F4191.	.0585	.0024
Stddev	.0008	.056	585.	.1563	.0004	.0012	182.	.0007	.0047
%RSD	.7424	1.372	7.135	21.88	.5297	5.503	4.353	1.152	193.7
#1	.1023	3.990	8811.	.8918	.0784	.0216	4392.	.0582	-.0020
#2	.1015	4.101	8132.	.5977	.0784	.0196	4147.	.0582	.0073
#3	.1030	4.040	7647.	.6534	.0776	.0216	4035.	.0593	.0020

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.1906	.0107	.6577	-.0027	.0634	.0200	-.0201	-.0008	.2930
Stddev	.0022	.0019	.0042	.0004	.0004	.0005	.0049	.0004	.0012
%RSD	1.137	17.93	.6336	15.10	.5895	2.436	24.28	51.84	.3982
#1	.1900	.0086	.6598	-.0024	.0631	.0197	-.0178	-.0010	.2917
#2	.1930	.0110	.6529	-.0024	.0634	.0206	-.0257	-.0003	.2936
#3	.1888	.0124	.6603	-.0031	.0638	.0198	-.0168	-.0010	.2937

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1897.2	5174.1	39352.	3758.4
Stddev	4.1	8.6	90.	11.6
%RSD	.21531	.16658	.22873	.30847
#1	1896.1	5178.8	39406.	3749.1
#2	1893.7	5164.1	39248.	3754.7
#3	1901.7	5179.3	39402.	3771.4

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/18/2016 11:46:59 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2478	38.89	2.036	2.009	1.968	39.34	2.005	2.011	1.921
Stddev	.0003	.15	.005	.006	.004	.11	.004	.004	.003
%RSD	.1134	.3847	.2655	.3155	.2241	.2685	.1971	.2065	.1329
#1	.2476	39.03	2.031	2.016	1.973	39.45	2.002	2.008	1.918
#2	.2477	38.91	2.036	2.006	1.967	39.32	2.004	2.009	1.923
#3	.2482	38.73	2.042	2.004	1.965	39.25	2.009	2.016	1.923
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.963	41.09	36.05	39.95	2.005	2.023	F33.39	2.045	1.936
Stddev	.001	.10	.16	.14	.002	.010	.17	.005	.005
%RSD	.0704	.2499	.4479	.3463	.1182	.4732	.5180	.2491	.2525
#1	1.963	41.18	35.88	40.05	2.005	2.014	33.22	2.040	1.931
#2	1.962	41.10	36.07	39.99	2.003	2.023	33.38	2.044	1.939
#3	1.965	40.98	36.20	39.79	2.008	2.033	33.56	2.050	1.939
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value							40.00		
Range							-10.00%		

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.026	2.026	2.102	2.093	1.996	1.988	1.970	1.995	2.001
Stddev	.006	.004	.005	.006	.004	.001	.004	.001	.004
%RSD	.2840	.2145	.2444	.2809	.1778	.0611	.1912	.0282	.1747
#1	2.021	2.025	2.097	2.088	2.000	1.988	1.966	1.996	1.998
#2	2.024	2.023	2.102	2.091	1.994	1.987	1.972	1.995	1.999
#3	2.032	2.031	2.107	2.099	1.994	1.989	1.973	1.996	2.005
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/18/2016 11:46:59 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2394.5	6026.8	48687.	3948.3
Stddev	5.4	9.5	183.	27.5
%RSD	.22722	.15788	.37648	.69738
#1	2400.5	6036.0	48815.	3957.2
#2	2389.9	6027.4	48769.	3917.4
#3	2393.0	6017.0	48477.	3970.3

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/18/2016 11:50:55 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0055	.0002	-.0002	-.0002	-.0098	.0000	.0000	-.0001
Stddev	.0002	.0100	.0006	.0001	.0001	.0036	.000	.000	.0002
%RSD	52.95	183.7	275.1	33.46	66.78	36.51	141.8	237.2	174.2
#1	.0004	.0135	.0008	-.0003	-.0002	-.0126	.0000	.0000	.0000
#2	.0004	-.0058	.0004	-.0003	.0000	-.0058	-.0001	.0000	.0000
#3	.0001	.0087	-.0005	-.0001	-.0002	-.0110	-.0001	-.0001	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0124	F.8684	.0104	-.0001	F.0011	.4056	-.0001	-.0003
Stddev	.0002	.0050	.0271	.0215	.0000	.0008	.0074	.0001	.0005
%RSD	57.77	40.61	3.126	206.1	13.37	67.08	1.835	82.87	200.6
#1	.0001	.0181	.8988	.0306	-.0001	.0019	.4059	-.0001	.0002
#2	.0003	.0104	.8599	.0130	-.0001	.0010	.4129	.0000	-.0009
#3	.0005	.0087	.8465	-.0123	-.0001	.0004	.3981	-.0002	-.0001
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit			.5000			.0010			
Low Limit			-.5000			-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0012	.0003	-.0012	.0001	-.0001	.0004	-.0004	-.0001	-.0003
Stddev	.0006	.0011	.0002	.0002	.0001	.0001	.0008	.0002	.0001
%RSD	47.17	417.1	13.92	220.3	67.50	23.15	212.6	178.9	27.87
#1	-.0006	.0015	-.0012	.0001	-.0001	.0004	-.0013	.0000	-.0002
#2	-.0014	-.0005	-.0014	.0003	-.0001	.0004	-.0001	.0000	-.0003
#3	-.0017	-.0003	-.0011	-.0001	.0000	.0003	.0002	-.0003	-.0004
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/18/2016 11:50:55 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2773.8	6326.8	50885.	3976.6
Stddev	7.8	17.4	282.	6.5
%RSD	.28166	.27497	.55326	.16323
#1	2779.1	6339.7	50927.	3983.7
#2	2764.8	6307.0	50584.	3975.1
#3	2777.5	6333.8	51143.	3970.9

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/18/2016 11:55:05 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2521	39.82	2.044	2.042	2.009	40.15	2.036	2.038	1.979	2.004
Stddev	.0004	.31	.002	.012	.012	.28	.004	.003	.004	.004
%RSD	.1405	.7788	.1081	.5771	.6056	.7052	.1748	.1583	.2248	.1795
#1	.2519	40.06	2.046	2.055	2.019	40.41	2.035	2.037	1.974	2.000
#2	.2525	39.47	2.042	2.032	1.996	39.85	2.034	2.035	1.983	2.006
#3	.2519	39.92	2.045	2.038	2.013	40.21	2.040	2.041	1.980	2.007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	42.05	39.18	40.28	2.051	2.047	37.77	2.058	1.979	2.039	2.040
Stddev	.26	.37	.23	.003	.007	.31	.002	.004	.004	.004
%RSD	.6200	.9487	.5602	.1336	.3544	.8209	.0916	.2242	.1859	.2076
#1	42.34	39.59	40.42	2.049	2.040	38.07	2.059	1.981	2.038	2.041
#2	41.85	38.87	40.02	2.054	2.046	37.45	2.056	1.974	2.036	2.036
#3	41.95	39.10	40.40	2.049	2.054	37.77	2.059	1.983	2.043	2.044
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.115	2.092	2.038	2.042	2.012	2.024	2.027
Stddev	.002	.001	.014	.004	.003	.004	.004
%RSD	.0708	.0613	.6670	.1703	.1550	.1925	.1706
#1	2.114	2.093	2.049	2.039	2.012	2.021	2.026
#2	2.114	2.091	2.023	2.046	2.008	2.028	2.024
#3	2.117	2.092	2.043	2.042	2.015	2.024	2.031
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/18/2016 11:55:05 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2358.7	5991.1	47787.	3923.8
Stddev	4.8	7.5	153.	42.9
%RSD	.20398	.12495	.32022	1.0929
#1	2355.1	5990.6	47960.	3874.4
#2	2364.2	5998.8	47729.	3945.8
#3	2356.8	5983.9	47671.	3951.1

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/18/2016 11:59:01 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005	-.0032	-.0006	-.0005	-.0002	-.0119	-.0001	.0000	.0001
Stddev	.0002	.0093	.0007	.0000	.0001	.0011	.0001	.000	.0001
%RSD	41.81	288.7	129.0	2.061	27.57	9.303	113.9	781.6	99.32
#1	.0005	-.0138	.0003	-.0005	-.0001	-.0129	.0000	.0000	.0000
#2	.0004	.0013	-.0010	-.0005	-.0002	-.0121	.0000	.0000	.0002
#3	.0008	.0030	-.0009	-.0005	-.0002	-.0107	-.0001	.0000	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0076	.3627	.0034	-.0001	F.0014	.1780	-.0002	-.0003
Stddev	.000	.0046	.0180	.0117	.0000	.0006	.0050	.0000	.0001
%RSD	2641.	60.95	4.966	344.8	52.90	44.92	2.829	22.81	49.60
#1	-.0004	.0128	.3834	-.0092	.0000	.0020	.1783	-.0002	-.0002
#2	.0004	.0039	.3527	.0054	-.0001	.0013	.1830	-.0001	-.0004
#3	-.0001	.0061	.3518	.0139	-.0001	.0008	.1729	-.0002	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0009	.0010	-.0007	.0000	-.0001	.0004	.0002	-.0001	-.0003
Stddev	.0018	.0026	.0006	.000	.0001	.0001	.0007	.0001	.0001
%RSD	210.2	249.8	87.60	325.6	141.7	19.95	335.4	99.81	19.79
#1	.0007	-.0008	-.0001	.0000	.0000	.0005	-.0006	-.0001	-.0002
#2	-.0004	.0040	-.0007	.0001	-.0002	.0004	.0006	-.0003	-.0003
#3	-.0028	-.0001	-.0013	-.0002	-.0001	.0004	.0006	-.0001	-.0004
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/18/2016 11:59:01 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2765.9	6304.0	50382.	3943.5
Stddev	6.4	7.1	135.	12.8
%RSD	.23035	.11204	.26872	.32409
#1	2767.0	6308.4	50454.	3935.3
#2	2759.0	6295.8	50466.	3937.0
#3	2771.6	6307.7	50226.	3958.2

Zoom In Zoom Out

Sample Name: MP30366-MB1 Acquired: 5/18/2016 12:09:38 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0014	.0063	-.0049	-.0028	F-.0025	-.0270	-.0010	-.0010
Stddev	.0009	.0095	.0022	.0009	.0004	.0012	.0000	.0004
%RSD	64.76	150.5	44.40	32.71	15.82	4.395	4.231	42.56
#1	.0004	.0016	-.0070	-.0035	-.0023	-.0264	-.0010	-.0011
#2	.0018	.0173	-.0027	-.0032	-.0030	-.0283	-.0009	-.0006
#3	.0020	.0001	-.0050	-.0018	-.0023	-.0262	-.0010	-.0015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit					.0020			
Low Limit					-.0020			

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0015	-.0448	1.143	.0111	-.0014	-.0075	.5864
Stddev	.0008	.0012	.0174	.055	.0488	.0001	.0007	.0405
%RSD	186.0	83.29	38.80	4.816	438.6	7.244	9.380	6.910
#1	.0012	.0020	-.0265	1.147	.0665	-.0015	-.0067	.5998
#2	-.0003	.0001	-.0611	1.086	-.0257	-.0013	-.0077	.6184
#3	.0003	.0023	-.0468	1.196	-.0075	-.0014	-.0080	.5408
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0005	-.0017	F-.0141	.0016	-.0013	F.0490	-.0019	-.0045
Stddev	.0003	.0023	.0036	.0073	.0018	.0016	.0003	.0003
%RSD	63.46	137.1	25.43	469.0	137.8	3.215	17.98	7.038
#1	-.0009	.0010	-.0129	.0099	-.0011	.0485	-.0016	-.0047
#2	-.0003	-.0028	-.0182	-.0019	-.0031	.0508	-.0023	-.0048
#3	-.0003	-.0031	-.0113	-.0034	.0004	.0478	-.0017	-.0042
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	None	Chk Fail	Chk Pass	Chk Pass
High Limit			.0025			.0250		
Low Limit			-.0025			-.0250		

Zoom In Zoom Out

Sample Name: MP30366-MB1 Acquired: 5/18/2016 12:09:38 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	-.0034	-.0023	F.0335
Stddev	.0023	.0018	.0003
%RSD	67.61	75.28	1.000
#1	-.0056	-.0035	.0339
#2	-.0038	-.0031	.0332
#3	-.0010	-.0003	.0335
Check ?	Chk Pass	Chk Pass	Chk Fail
High Limit			.0100
Low Limit			-.0100

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2868.3	6562.7	52718.	4143.7
Stddev	5.5	16.8	764.	39.3
%RSD	.19245	.25536	1.4499	.94878
#1	2874.7	6580.2	51835.	4104.4
#2	2865.3	6546.8	53172.	4143.8
#3	2865.0	6561.2	53146.	4183.0

Zoom In Zoom Out

Sample Name: MP30366-B1 Acquired: 5/18/2016 12:13:46 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0463	25.43	1.915	2.009	.0467	24.49	.0485	.4999	.1907	.2452
Stddev	.0046	.09	.004	.009	.0012	.13	.0001	.0005	.0008	.0015
%RSD	10.02	.3662	.1889	.4448	2.645	.5478	.2378	.0980	.4364	.6029
#1	.0412	25.33	1.911	2.001	.0471	24.41	.0483	.4994	.1916	.2445
#2	.0502	25.51	1.915	2.019	.0477	24.64	.0485	.5003	.1899	.2443
#3	.0476	25.46	1.918	2.009	.0453	24.41	.0485	.4999	.1906	.2469
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.39	24.40	24.43	.5038	.4599	23.46	.5122	.4571	.4595	1.939
Stddev	.16	.11	.11	.0013	.0009	.12	.0024	.0002	.0056	.009
%RSD	.6337	.4342	.4516	.2523	.1986	.5051	.4625	.0405	1.228	.4401
#1	25.21	24.31	24.32	.5030	.4590	23.38	.5107	.4572	.4544	1.942
#2	25.52	24.52	24.41	.5052	.4608	23.60	.5110	.4569	.4656	1.929
#3	25.44	24.36	24.54	.5031	.4598	23.40	.5149	.4572	.4585	1.945
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0074	.5543	.4645	.4664	1.905	.4499	.5406
Stddev	.0017	.0019	.0039	.0015	.009	.0018	.0010
%RSD	23.38	.3417	.8327	.3300	.4759	.3896	.1914
#1	.0055	.5545	.4622	.4655	1.901	.4495	.5416
#2	.0089	.5524	.4690	.4681	1.899	.4484	.5396
#3	.0079	.5561	.4624	.4654	1.915	.4518	.5406
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP30366-B1 Acquired: 5/18/2016 12:13:46 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2714.4	6382.0	51354.	4050.3
Stddev	7.8	8.3	216.	3.2
%RSD	.28908	.13036	.42088	.07816
#1	2706.0	6373.3	51601.	4050.6
#2	2721.6	6389.8	51258.	4047.0
#3	2715.6	6382.8	51202.	4053.3

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: FA32306-32R Acquired: 5/18/2016 12:17:44 Type: Unk
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0061	144.0	.0217	.4514	-.0006	9.437	-.0013	.0146	.1900	.0816
Stddev	.0003	.5	.0015	.0015	.0003	.038	.0001	.0003	.0027	.0016
%RSD	4.242	.3377	6.914	.3433	47.01	.4055	6.311	1.768	1.395	1.921
#1	.0064	144.2	.0213	.4514	-.0008	9.443	-.0012	.0148	.1922	.0820
#2	.0058	143.4	.0204	.4499	-.0005	9.396	-.0012	.0143	.1871	.0830
#3	.0060	144.3	.0233	.4529	-.0003	9.472	-.0013	.0146	.1909	.0799

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	143.4	10.87	9.063	.6186	.0039	1.905	.0974	.3485	-.0019	-.0012
Stddev	.3	.15	.099	.0013	.0010	.050	.0009	.0020	.0034	.0065
%RSD	.1789	1.415	1.092	.2100	24.43	2.597	.9540	.5768	174.9	531.9
#1	143.1	10.88	9.151	.6185	.0029	1.957	.0983	.3477	-.0016	-.0085
#2	143.5	10.72	8.956	.6199	.0041	1.898	.0973	.3470	-.0055	.0040
#3	143.5	11.03	9.082	.6173	.0048	1.859	.0965	.3508	.0013	.0009

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	4.474	.0464	.1412	5.420	-.0032	.3678	.1075
Stddev	.002	.0015	.0005	.004	.0010	.0019	.0004
%RSD	.0419	3.208	.3707	.0806	31.06	.5291	.3520
#1	4.475	.0464	.1414	5.423	-.0028	.3658	.1078
#2	4.472	.0479	.1406	5.415	-.0043	.3697	.1071
#3	4.475	.0449	.1416	5.423	-.0025	.3678	.1077

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2721.6	6495.3	51723.	4089.6
Stddev	1.4	5.8	207.	36.0
%RSD	.05251	.08922	.40054	.87995
#1	2723.0	6496.4	51747.	4049.1
#2	2721.5	6489.0	51505.	4102.2
#3	2720.2	6500.5	51917.	4117.7

Zoom In Zoom Out

Sample Name: MP30366-D1 Acquired: 5/18/2016 12:21:46 Type: Unk
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0055	140.7	.0235	.4437	-.0003	9.246	-.0009	.0148	.1852	.0801
Stddev	.0015	.2	.0018	.0012	.0003	.039	.0001	.0011	.0013	.0009
%RSD	28.00	.1105	7.735	.2676	87.88	.4205	14.73	7.729	.7277	1.122
#1	.0039	140.9	.0215	.4448	-.0003	9.264	-.0010	.0142	.1840	.0801
#2	.0069	140.6	.0251	.4437	-.0006	9.202	-.0008	.0141	.1848	.0809
#3	.0057	140.7	.0238	.4424	.0000	9.273	-.0010	.0161	.1866	.0791

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	142.0	11.91	9.015	.6085	.0030	2.382	.0957	.3565	-.0047	-.0033
Stddev	.2	.19	.208	.0011	.0006	.035	.0010	.0050	.0048	.0036
%RSD	.1234	1.585	2.313	.1729	20.82	1.478	1.024	1.389	101.9	110.1
#1	142.2	12.07	8.857	.6096	.0027	2.420	.0955	.3516	-.0076	-.0070
#2	141.9	11.70	9.251	.6084	.0038	2.350	.0967	.3615	.0008	.0002
#3	142.0	11.96	8.936	.6076	.0027	2.377	.0947	.3564	-.0073	-.0030

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	4.641	.0497	.1377	5.327	-.0048	.3673	.1171
Stddev	.002	.0005	.0011	.018	.0036	.0018	.0002
%RSD	.0446	1.072	.7665	.3342	74.92	.4768	.1690
#1	4.642	.0503	.1381	5.344	-.0086	.3693	.1172
#2	4.638	.0497	.1365	5.329	-.0016	.3659	.1172
#3	4.641	.0492	.1384	5.309	-.0041	.3668	.1169

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2713.5	6483.5	51755.	4110.0
Stddev	8.8	18.6	86.	35.8
%RSD	.32392	.28699	.16532	.87217
#1	2719.8	6504.0	51660.	4136.9
#2	2703.5	6467.7	51827.	4069.3
#3	2717.3	6478.7	51776.	4123.7

Zoom In Zoom Out

Sample Name: MP30366-D2 Acquired: 5/18/2016 12:25:50 Type: Unk
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0043	161.1	.0255	.4887	.0000	10.52	-.0014	.0157	.2089	.0885
Stddev	.0020	.2	.0026	.0007	.0002	.02	.0001	.0006	.0007	.0015
%RSD	47.41	.1217	10.28	.1500	511.0	.2009	9.821	3.518	.3456	1.695
#1	.0029	161.2	.0282	.4892	.0003	10.50	-.0012	.0151	.2098	.0902
#2	.0066	161.3	.0251	.4889	-.0002	10.54	-.0015	.0160	.2084	.0877
#3	.0033	160.9	.0230	.4878	.0000	10.52	-.0014	.0161	.2087	.0875

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	157.4	11.77	10.02	.6750	.0042	1.959	.1083	.3835	.0000	.0002
Stddev	.3	.05	.16	.0011	.0004	.036	.0001	.0015	.002	.0032
%RSD	.1932	.4122	1.597	.1670	9.449	1.830	.0949	.3834	6269.	1492.
#1	157.7	11.76	9.862	.6738	.0039	1.922	.1082	.3834	.0016	-.0024
#2	157.4	11.83	10.18	.6751	.0042	1.993	.1084	.3850	-.0002	.0037
#3	157.1	11.73	10.01	.6761	.0047	1.962	.1084	.3820	-.0014	-.0006

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	4.910	.0504	.1557	5.990	-.0057	.4020	.1336
Stddev	.013	.0003	.0002	.007	.0022	.0015	.0003
%RSD	.2663	.6495	.1208	.1137	38.52	.3700	.2575
#1	4.897	.0505	.1556	5.982	-.0039	.4005	.1333
#2	4.911	.0507	.1559	5.995	-.0052	.4020	.1336
#3	4.923	.0501	.1556	5.992	-.0082	.4034	.1339

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2709.1	6511.1	51509.	4049.3
Stddev	.8	6.0	81.	.6
%RSD	.03091	.09230	.15803	.01548
#1	2708.3	6518.0	51598.	4049.5
#2	2710.0	6508.6	51438.	4049.8
#3	2709.1	6506.7	51492.	4048.6

Zoom In Zoom Out

Sample Name: MP30366-SD1 Acquired: 5/18/2016 12:29:53 Type: Unk
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 25.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0174	266.2	.0183	1.366	-.0097	13.09	-.0068	.0123	.4059	.0854
Stddev	.0153	2.6	.0063	.024	.0019	.07	.0004	.0021	.1063	.0081
%RSD	87.84	.9851	34.55	1.774	19.70	.5069	5.483	17.33	26.19	9.497
#1	.0174	269.2	.0252	1.361	-.0080	13.17	-.0069	.0132	.4236	.0841
#2	.0021	264.6	.0168	1.392	-.0093	13.08	-.0070	.0098	.2918	.0781
#3	.0327	264.8	.0128	1.344	-.0118	13.03	-.0063	.0138	.5022	.0941

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	169.5	35.57	12.78	.7756	-.0311	15.72	.1680	.3614	-.0533	.0065
Stddev	.4	.30	.55	.0137	.0017	.97	.0021	.0172	.0117	.0245
%RSD	.2484	.8299	4.304	1.763	5.356	6.161	1.238	4.759	21.87	378.5
#1	169.4	35.91	12.17	.7613	-.0326	15.17	.1657	.3554	-.0632	-.0187
#2	170.0	35.36	13.22	.7769	-.0313	15.15	.1698	.3807	-.0405	.0078
#3	169.2	35.45	12.96	.7886	-.0293	16.84	.1686	.3479	-.0563	.0303

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	248.7	.0489	.2774	13.15	-.0146	.4481	.2689
Stddev	9.1	.0015	.0060	.23	.0127	.0029	.0027
%RSD	3.639	2.967	2.172	1.718	87.03	.6549	1.000
#1	259.0	.0498	.2842	13.41	-.0270	.4482	.2692
#2	242.2	.0497	.2754	13.08	-.0151	.4451	.2661
#3	244.8	.0472	.2727	12.97	-.0017	.4510	.2714

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2747.8	6453.7	51069.	4007.1
Stddev	4.5	19.3	257.	42.0
%RSD	.16331	.29936	.50418	1.0472
#1	2744.7	6442.0	50773.	3989.6
#2	2753.0	6476.0	51244.	3976.8
#3	2745.8	6443.1	51189.	4055.0

Zoom In Zoom Out

Sample Name: MP30366-PS1 Acquired: 5/18/2016 12:33:58 Type: Unk
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0504	152.5	.1319	.7322	.0527	15.24	.0507	.0674	.2551	.2117
Stddev	.0005	.1	.0017	.0018	.0007	.01	.0002	.0004	.0019	.0009
%RSD	1.013	.0809	1.322	.2465	1.352	.0837	.3420	.5919	.7514	.4110
#1	.0504	152.6	.1328	.7307	.0527	15.23	.0508	.0674	.2545	.2122
#2	.0498	152.6	.1329	.7342	.0519	15.25	.0505	.0671	.2536	.2107
#3	.0509	152.4	.1299	.7318	.0534	15.24	.0508	.0679	.2573	.2122

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	150.2	20.81	14.51	.6899	.1026	11.90	.2041	.4086	.1015	.0978
Stddev	.3	.08	.09	.0009	.0007	.12	.0010	.0038	.0048	.0023
%RSD	.1883	.4076	.6345	.1322	.6798	.9756	.4751	.9397	4.687	2.318
#1	149.9	20.90	14.61	.6909	.1021	11.89	.2040	.4062	.1037	.0956
#2	150.4	20.73	14.43	.6897	.1034	12.02	.2031	.4130	.0960	.1001
#3	150.3	20.79	14.50	.6891	.1024	11.78	.2051	.4066	.1048	.0978

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	4.510	.0970	.1963	5.734	.0996	.4252	.3897
Stddev	.013	.0020	.0014	.014	.0067	.0007	.0003
%RSD	.2877	2.103	.7003	.2410	6.733	.1679	.0724
#1	4.515	.0970	.1952	5.749	.1065	.4251	.3900
#2	4.495	.0949	.1978	5.730	.0994	.4259	.3896
#3	4.519	.0990	.1959	5.723	.0931	.4245	.3894

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2684.6	6524.3	50785.	4037.3
Stddev	10.3	7.3	111.	17.7
%RSD	.38466	.11195	.21814	.43771
#1	2681.9	6519.2	50739.	4056.4
#2	2675.8	6521.1	50912.	4021.5
#3	2696.0	6532.7	50705.	4034.0

Zoom In Zoom Out

Sample Name: MP30366-S1 Acquired: 5/18/2016 12:38:01 Type: Unk
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0583	221.1	2.008	2.749	.0559	39.31	.0521	.5636	.4529	.3730
Stddev	.0014	.3	.012	.004	.0009	.10	.0001	.0016	.0023	.0010
%RSD	2.434	.1506	.5888	.1578	1.623	.2527	.1033	.2797	.5148	.2772
#1	.0567	221.1	2.004	2.746	.0551	39.20	.0521	.5620	.4535	.3742
#2	.0592	220.8	1.998	2.747	.0556	39.38	.0521	.5635	.4503	.3727
#3	.0590	221.4	2.021	2.754	.0569	39.36	.0522	.5651	.4549	.3722

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	193.7	38.44	37.99	1.255	.4764	28.40	.6780	.9271	.1650	2.037
Stddev	.3	.09	.09	.002	.0014	.02	.0017	.0017	.0034	.006
%RSD	.1462	.2319	.2355	.1426	.3007	.0803	.2524	.1887	2.036	.3081
#1	193.4	38.55	37.96	1.254	.4755	28.37	.6767	.9291	.1671	2.030
#2	193.8	38.40	37.92	1.253	.4757	28.41	.6772	.9258	.1611	2.037
#3	193.9	38.39	38.09	1.257	.4780	28.41	.6799	.9263	.1667	2.043

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.699	.5699	.7014	6.373	2.142	.9281	.6550
Stddev	.010	.0022	.0021	.007	.004	.0021	.0014
%RSD	.1725	.3789	.2930	.1159	.2023	.2277	.2205
#1	5.697	.5674	.7024	6.372	2.143	.9293	.6538
#2	5.691	.5707	.6990	6.367	2.137	.9257	.6546
#3	5.710	.5715	.7028	6.381	2.145	.9293	.6566

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2640.1	6523.7	50291.	4053.7
Stddev	4.6	1.8	147.	17.3
%RSD	.17454	.02763	.29214	.42689
#1	2636.0	6521.7	50353.	4069.9
#2	2639.2	6525.2	50396.	4035.5
#3	2645.1	6524.2	50123.	4055.9

Zoom In Zoom Out

Sample Name: MP30366-S2 Acquired: 5/18/2016 12:43:55 Type: Unk
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0552	208.7	1.926	2.637	.0548	37.94	.0502	.5444	.4326	.3550
Stddev	.0020	.5	.005	.008	.0010	.10	.0000	.0017	.0032	.0009
%RSD	3.672	.2634	.2779	.3044	1.845	.2761	.0717	.3214	.7498	.2508
#1	.0565	209.3	1.922	2.645	.0559	38.05	.0502	.5445	.4322	.3542
#2	.0528	208.2	1.923	2.637	.0539	37.84	.0502	.5426	.4361	.3549
#3	.0562	208.6	1.932	2.629	.0544	37.94	.0502	.5461	.4296	.3560

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	181.4	36.85	36.18	1.189	.4607	27.72	.6506	.8704	.1598	1.953
Stddev	.5	.13	.13	.002	.0017	.10	.0014	.0041	.0027	.007
%RSD	.2504	.3403	.3544	.1536	.3683	.3463	.2137	.4713	1.714	.3813
#1	181.8	36.88	36.13	1.187	.4598	27.81	.6517	.8666	.1620	1.956
#2	181.4	36.72	36.09	1.191	.4596	27.73	.6490	.8698	.1568	1.945
#3	180.9	36.96	36.33	1.189	.4626	27.62	.6512	.8747	.1607	1.958

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.498	.5423	.6735	6.058	2.073	.8765	.6477
Stddev	.014	.0017	.0023	.010	.011	.0014	.0015
%RSD	.2604	.3101	.3347	.1584	.5219	.1610	.2278
#1	5.501	.5432	.6759	6.048	2.061	.8780	.6480
#2	5.482	.5404	.6714	6.067	2.081	.8761	.6461
#3	5.510	.5434	.6733	6.058	2.078	.8753	.6491

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2652.4	6566.5	50431.	4009.0
Stddev	4.1	4.5	135.	42.0
%RSD	.15625	.06839	.26854	1.0482
#1	2656.5	6562.6	50417.	3960.5
#2	2648.2	6571.4	50304.	4034.6
#3	2652.4	6565.5	50573.	4032.0

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/18/2016 12:50:58 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2545	40.77	2.031	2.046	2.038	41.24	2.053	2.052	2.037	2.032
Stddev	.0006	.14	.002	.005	.007	.18	.000	.001	.003	.002
%RSD	.2258	.3504	.0984	.2679	.3416	.4310	.0175	.0363	.1529	.0990
#1	.2539	40.89	2.034	2.046	2.039	41.34	2.053	2.052	2.036	2.034
#2	.2548	40.61	2.030	2.040	2.030	41.04	2.053	2.052	2.035	2.031
#3	.2550	40.82	2.031	2.051	2.043	41.35	2.053	2.051	2.041	2.030
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	42.75	40.80	40.82	2.081	2.049	40.58	2.052	2.008	2.029	2.027
Stddev	.12	.13	.15	.003	.003	.13	.002	.005	.003	.003
%RSD	.2707	.3137	.3635	.1576	.1327	.3107	.0731	.2555	.1510	.1632
#1	42.77	40.91	40.96	2.080	2.046	40.67	2.053	2.003	2.029	2.025
#2	42.63	40.66	40.67	2.078	2.050	40.44	2.051	2.006	2.033	2.030
#3	42.86	40.84	40.81	2.085	2.052	40.62	2.050	2.013	2.027	2.024
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.105	2.063	2.069	2.083	2.041	2.040	2.040
Stddev	.002	.000	.006	.004	.007	.002	.000
%RSD	.0725	.0176	.2926	.1748	.3663	.1122	.0117
#1	2.107	2.063	2.071	2.083	2.037	2.041	2.040
#2	2.104	2.063	2.062	2.079	2.036	2.037	2.040
#3	2.104	2.063	2.074	2.086	2.049	2.042	2.040
Check ?	None	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass
Value								
Range								

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/18/2016 12:50:58 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2367.4	6065.8	47605.	3855.3
Stddev	6.7	6.5	232.	13.5
%RSD	.28095	.10755	.48772	.35044
#1	2373.1	6073.1	47688.	3842.8
#2	2368.9	6063.6	47784.	3869.6
#3	2360.1	6060.6	47342.	3853.4

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/18/2016 12:58:32 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0055	-.0003	-.0003	-.0003	-.0103	-.0001	-.0002
Stddev	.0006	.0157	.0010	.0002	.0001	.0024	.0000	.0001
%RSD	978.8	282.9	372.1	61.30	27.16	23.42	31.88	32.68
#1	.0002	.0179	-.0005	-.0001	-.0004	-.0079	-.0001	-.0002
#2	.0004	-.0121	-.0011	-.0004	-.0002	-.0127	-.0002	-.0001
#3	-.0007	.0108	.0008	-.0005	-.0003	-.0104	-.0002	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0004	-.0001	-.0086	.0722	.0170	-.0003	F-.0012	.0260
Stddev	.0001	.0001	.0013	.0267	.0347	.0000	.0001	.0094
%RSD	33.31	101.1	15.18	37.01	204.1	17.63	9.888	36.26
#1	-.0005	-.0001	-.0078	.0477	.0455	-.0003	-.0011	.0189
#2	-.0003	-.0002	-.0080	.1007	-.0216	-.0002	-.0012	.0367
#3	-.0003	.0000	-.0102	.0683	.0272	-.0003	-.0014	.0224
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit							.0010	
Low Limit							-.0010	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0005	F-.0023	-.0007	-.0008	-.0003	-.0002	-.0008
Stddev	.0001	.0005	.0008	.0009	.0004	.0002	.0001	.0001
%RSD	71.65	120.0	33.64	138.4	52.17	64.99	78.40	6.263
#1	-.0001	.0010	-.0028	-.0008	-.0012	-.0001	-.0002	-.0008
#2	.0000	.0005	-.0014	.0003	-.0004	-.0005	.0000	-.0008
#3	-.0001	-.0001	-.0027	-.0016	-.0008	-.0004	-.0002	-.0007
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit			.0020					
Low Limit			-.0020					

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/18/2016 12:58:32 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	.0000	-.0003	-.0004
Stddev	.001	.0001	.0000
%RSD	1595.	37.04	9.789
#1	-.0007	-.0005	-.0003
#2	-.0001	-.0002	-.0004
#3	.0007	-.0003	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2772.9	6401.3	50372.	3911.8
Stddev	4.3	6.1	145.	13.0
%RSD	.15404	.09565	.28845	.33251
#1	2775.2	6396.6	50223.	3897.2
#2	2775.5	6408.2	50513.	3922.1
#3	2768.0	6399.1	50379.	3916.2

Zoom In Zoom Out

Sample Name: MP30368-MB1 Acquired: 5/18/2016 13:03:50 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	-.0003	-.0009	-.0006	-.0005	-.0126	-.0002	-.0003	-.0002	-.0002
Stddev	.0002	.0116	.0003	.0002	.0000	.0007	.0000	.0001	.0003	.0002
%RSD	98.59	4570.	38.36	37.62	9.696	5.750	12.59	43.67	134.8	67.04
#1	.0003	-.0127	-.0011	-.0004	-.0005	-.0126	-.0002	-.0002	.0001	-.0002
#2	.0000	.0102	-.0005	-.0007	-.0005	-.0118	-.0002	-.0002	-.0005	-.0001
#3	.0004	.0018	-.0011	-.0008	-.0004	-.0133	-.0002	-.0004	-.0002	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0142	.0752	.0203	-.0004	-.0015	.0220	-.0003	-.0011	-.0015	-.0011
Stddev	.0007	.0184	.0204	.0000	.0001	.0080	.0001	.0002	.0014	.0013
%RSD	5.264	24.50	100.5	8.248	4.589	36.31	30.83	17.12	96.10	116.5
#1	-.0143	.0559	.0413	-.0003	-.0015	.0159	-.0002	-.0013	-.0014	-.0010
#2	-.0148	.0926	.0189	-.0003	-.0015	.0190	-.0005	-.0010	-.0001	.0002
#3	-.0134	.0771	.0006	-.0004	-.0016	.0310	-.0003	-.0010	-.0029	-.0024
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0078	-.0005	-.0004	-.0009	-.0005	-.0006	-.0004
Stddev	.0000	.0002	.0000	.0001	.0003	.0000	.0000
%RSD	.0897	34.57	6.593	11.28	63.09	7.263	4.757
#1	.0078	-.0003	-.0004	-.0009	-.0008	-.0006	-.0004
#2	.0078	-.0004	-.0004	-.0008	-.0004	-.0006	-.0005
#3	.0078	-.0006	-.0004	-.0010	-.0002	-.0007	-.0004
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP30368-MB1 Acquired: 5/18/2016 13:03:50 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2828.0	6561.7	51344.	4026.5
Stddev	3.6	11.1	185.	31.3
%RSD	.12646	.16962	.35971	.77760
#1	2828.1	6553.5	51330.	4013.4
#2	2831.6	6574.4	51536.	4062.3
#3	2824.4	6557.2	51167.	4003.9

Zoom In Zoom Out

Sample Name: MP30368-B1 Acquired: 5/18/2016 13:08:00 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0472	26.35	1.894	2.014	.0504	25.21	.0490	.4926	.2013	.2499
Stddev	.0001	.07	.007	.002	.0001	.06	.0001	.0014	.0010	.0007
%RSD	.1864	.2686	.3737	.0977	.1721	.2242	.1572	.2786	.4774	.2622
#1	.0473	26.28	1.886	2.016	.0504	25.18	.0490	.4911	.2023	.2499
#2	.0472	26.34	1.895	2.013	.0503	25.18	.0491	.4933	.2009	.2493
#3	.0471	26.42	1.900	2.014	.0505	25.28	.0490	.4936	.2005	.2506
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.53	24.31	24.30	.5080	.4642	24.51	.4946	.4743	.4803	1.911
Stddev	.01	.05	.17	.0005	.0016	.06	.0016	.0013	.0025	.006
%RSD	.0401	.1858	.6929	.0907	.3493	.2422	.3143	.2796	.5123	.3305
#1	25.54	24.36	24.34	.5085	.4624	24.48	.4932	.4729	.4783	1.905
#2	25.52	24.26	24.12	.5079	.4647	24.48	.4944	.4755	.4796	1.910
#3	25.54	24.31	24.45	.5076	.4656	24.58	.4962	.4745	.4831	1.918
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0152	.4759	.4776	.4812	1.944	.4589	.4877
Stddev	.0007	.0016	.0017	.0020	.007	.0019	.0009
%RSD	4.885	.3333	.3663	.4243	.3442	.4119	.1838
#1	.0152	.4743	.4759	.4836	1.936	.4611	.4867
#2	.0145	.4758	.4775	.4800	1.948	.4576	.4880
#3	.0160	.4775	.4794	.4800	1.948	.4581	.4885
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP30368-B1 Acquired: 5/18/2016 13:08:00 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2574.9	6423.4	49435.	3996.6
Stddev	2.5	9.2	186.	10.8
%RSD	.09547	.14391	.37600	.26999
#1	2577.5	6434.0	49376.	3990.8
#2	2572.7	6418.5	49286.	3989.9
#3	2574.5	6417.6	49644.	4009.0

Zoom In Zoom Out

Sample Name: FA33957-21 Acquired: 5/18/2016 13:11:57 Type: Unk
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0005	4.114	.0140	.0152	.0002	335.4	.0112	.0349	.0141
Stddev	.0002	.033	.0001	.0003	.0001	2.8	.0001	.0001	.0001
%RSD	36.04	.7903	.4049	1.962	28.28	.8394	.8927	.4290	.7886
#1	.0003	4.152	.0140	.0155	.0003	334.0	.0112	.0351	.0141
#2	.0006	4.100	.0141	.0153	.0002	333.5	.0111	.0348	.0141
#3	.0005	4.092	.0140	.0149	.0003	338.7	.0113	.0349	.0143

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0050	2.635	8.456	455.4	F22.68	-.0009	F93.92	.2664	.0022
Stddev	.0002	.021	.039	2.3	.14	.0001	.67	.0002	.0005
%RSD	3.653	.8164	.4645	.4972	.6123	11.25	.7108	.0799	22.79
#1	.0052	2.638	8.467	457.6	22.52	-.0009	94.65	.2665	.0024
#2	.0050	2.613	8.412	453.1	22.79	-.0008	93.35	.2662	.0027
#3	.0049	2.655	8.488	455.6	22.72	-.0009	93.75	.2666	.0017

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0014	.0154	28.88	-.0012	.1580	.0890	.0134	.0367	.0450
Stddev	.0017	.0009	.05	.0001	.0011	.0041	.0012	.0004	.0001
%RSD	121.5	6.132	.1744	12.70	.7016	4.626	8.986	.9662	.2413
#1	-.0009	.0149	28.85	-.0011	.1593	.0925	.0148	.0364	.0451
#2	-.0033	.0148	28.86	-.0013	.1572	.0845	.0127	.0368	.0449
#3	.0000	.0165	28.94	-.0010	.1575	.0899	.0127	.0371	.0451

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2222.1	5825.1	45228.	3968.5
Stddev	.6	6.7	442.	23.9
%RSD	.02563	.11563	.97663	.60290
#1	2222.7	5825.4	45677.	3949.4
#2	2221.6	5831.7	44794.	3995.3
#3	2221.9	5818.2	45213.	3960.8

Zoom In Zoom Out

Sample Name: MP30368-D1 Acquired: 5/18/2016 13:16:17 Type: Unk
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0009	4.036	.0144	.0155	.0002	337.4	.0112	.0350	.0145
Stddev	.0001	.021	.0008	.0000	.0000	7.3	.0000	.0000	.0002
%RSD	11.93	.5313	5.850	.1674	16.55	2.153	.3027	.0964	1.639
#1	.0008	4.055	.0139	.0155	.0002	342.2	.0112	.0350	.0147
#2	.0008	4.013	.0154	.0156	.0002	329.1	.0113	.0350	.0143
#3	.0010	4.040	.0139	.0155	.0002	341.1	.0112	.0351	.0147

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0050	2.620	8.669	459.1	F22.83	-.0013	F92.81	.2674	.0026
Stddev	.0002	.010	.018	1.1	.14	.0001	.15	.0005	.0005
%RSD	4.451	.3912	.2085	.2354	.6222	5.332	.1634	.1719	20.11
#1	.0051	2.618	8.653	459.6	22.84	-.0014	92.94	.2676	.0031
#2	.0047	2.610	8.689	457.9	22.68	-.0013	92.85	.2668	.0021
#3	.0052	2.631	8.665	459.9	22.97	-.0012	92.64	.2677	.0025

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0017	.0159	28.88	-.0009	.1583	.0840	.0121	.0372	.0451
Stddev	.0007	.0024	.03	.0000	.0004	.0024	.0003	.0005	.0001
%RSD	44.28	15.39	.0933	4.184	.2700	2.857	2.682	1.288	.3102
#1	-.0013	.0149	28.89	-.0009	.1579	.0867	.0122	.0369	.0452
#2	-.0012	.0186	28.85	-.0010	.1587	.0830	.0117	.0370	.0452
#3	-.0026	.0140	28.90	-.0009	.1582	.0823	.0124	.0378	.0449

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2223.7	5825.6	44995.	3948.9
Stddev	3.6	9.2	347.	32.3
%RSD	.16237	.15733	.77115	.81766
#1	2219.9	5815.6	45259.	3939.5
#2	2227.1	5833.7	45124.	3984.9
#3	2224.1	5827.4	44602.	3922.4

Zoom In Zoom Out

Sample Name: MP30368-SD1 Acquired: 5/18/2016 13:20:39 Type: Unk
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0024	4.492	.0185	.0128	-.0015	380.9	.0116	.0381	.0171
Stddev	.0012	.055	.0024	.0003	.0001	.4	.0001	.0004	.0009
%RSD	51.43	1.216	12.93	2.196	7.843	.1177	.6859	1.135	5.557
#1	.0033	4.547	.0167	.0131	-.0014	380.7	.0115	.0376	.0181
#2	.0010	4.438	.0212	.0126	-.0016	380.5	.0116	.0385	.0168
#3	.0029	4.489	.0175	.0127	-.0016	381.4	.0117	.0382	.0162

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0038	2.836	9.667	501.7	F27.87	-.0106	101.5	.2973	.0004
Stddev	.0005	.030	.054	.3	.16	.0002	.2	.0011	.0024
%RSD	13.83	1.075	.5569	.0642	.5719	1.878	.2083	.3779	610.4
#1	.0035	2.808	9.720	501.3	28.04	-.0109	101.7	.2983	-.0014
#2	.0044	2.830	9.612	501.9	27.72	-.0105	101.3	.2961	.0031
#3	.0036	2.868	9.668	501.8	27.85	-.0105	101.5	.2975	-.0006

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0154	.0112	30.66	-.0031	.1707	.0935	.0169	.0412	.0845
Stddev	.0040	.0098	.02	.0015	.0011	.0051	.0020	.0010	.0001
%RSD	26.01	87.95	.0517	48.54	.6585	5.461	11.60	2.520	.1687
#1	-.0108	.0082	30.65	-.0031	.1708	.0982	.0146	.0412	.0846
#2	-.0173	.0222	30.68	-.0046	.1695	.0881	.0182	.0401	.0846
#3	-.0182	.0032	30.65	-.0016	.1717	.0943	.0179	.0422	.0844

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2482.5	6168.1	47765.	3926.4
Stddev	9.1	15.8	277.	13.9
%RSD	.36723	.25556	.58061	.35430
#1	2490.3	6185.8	47673.	3918.6
#2	2484.8	6162.8	48077.	3942.5
#3	2472.5	6155.6	47545.	3918.1

Zoom In Zoom Out

Sample Name: MP30368-PS1 Acquired: 5/18/2016 13:24:52 Type: Unk
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0494	6.726	.1208	.2823	.0510	340.3	.0604	.0833	.0661
Stddev	.0010	.037	.0003	.0015	.0003	2.4	.0001	.0003	.0002
%RSD	2.079	.5549	.2209	.5270	.4921	.7051	.1897	.3092	.2336
#1	.0483	6.759	.1209	.2830	.0512	337.8	.0603	.0830	.0663
#2	.0499	6.685	.1205	.2806	.0507	340.4	.0604	.0834	.0660
#3	.0502	6.734	.1209	.2834	.0511	342.6	.0605	.0835	.0661

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.1125	5.606	18.74	459.5	F22.52	.0967	F102.3	.3572	.0505
Stddev	.0005	.025	.10	1.4	.05	.0004	.3	.0008	.0015
%RSD	.4598	.4544	.5081	.3091	.2152	.4218	.3044	.2104	3.022
#1	.1130	5.599	18.81	460.7	22.55	.0968	102.6	.3565	.0519
#2	.1124	5.585	18.63	458.0	22.46	.0962	102.0	.3571	.0489
#3	.1120	5.634	18.78	460.0	22.54	.0970	102.3	.3580	.0509

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.1078	.1179	28.37	.0448	.2073	.1887	.1099	.0851	.2937
Stddev	.0010	.0028	.06	.0003	.0008	.0018	.0013	.0002	.0003
%RSD	.9291	2.393	.2188	.6343	.4038	.9572	1.179	.1930	.1159
#1	.1066	.1149	28.31	.0445	.2073	.1907	.1114	.0852	.2933
#2	.1081	.1183	28.36	.0450	.2064	.1883	.1091	.0849	.2937
#3	.1085	.1205	28.44	.0449	.2081	.1871	.1092	.0851	.2940

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2204.3	5801.0	44605.	3870.0
Stddev	6.8	3.0	286.	17.7
%RSD	.30953	.05178	.64076	.45707
#1	2198.1	5799.3	44293.	3857.4
#2	2211.6	5804.5	44854.	3862.4
#3	2203.2	5799.3	44667.	3890.2

Zoom In Zoom Out

Sample Name: MP30368-S1 Acquired: 5/18/2016 13:29:09 Type: Unk
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0519	31.38	2.046	2.094	.0508	363.9	.0595	.5116	.2168
Stddev	.0006	.08	.004	.005	.0003	2.1	.0001	.0006	.0002
%RSD	1.118	.2512	.1936	.2200	.6085	.5641	.1321	.1256	.0711
#1	.0517	31.37	2.049	2.095	.0510	362.3	.0595	.5120	.2166
#2	.0526	31.46	2.048	2.097	.0510	366.2	.0595	.5120	.2169
#3	.0515	31.30	2.042	2.088	.0504	363.4	.0596	.5109	.2169

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2660	28.17	34.14	485.8	F23.19	.4740	F117.0	.7382	.4850
Stddev	.0006	.10	.09	1.0	.09	.0003	1.3	.0012	.0007
%RSD	.2144	.3614	.2567	.1979	.4073	.0576	1.106	.1573	.1342
#1	.2667	28.24	34.24	485.2	23.23	.4743	117.6	.7392	.4848
#2	.2660	28.22	34.11	487.0	23.25	.4739	115.5	.7384	.4845
#3	.2655	28.06	34.07	485.3	23.08	.4738	117.8	.7369	.4858

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5087	2.087	28.74	.4637	.6558	.5798	1.947	.5099	.5206
Stddev	.0017	.007	.05	.0010	.0012	.0039	.002	.0011	.0003
%RSD	.3430	.3488	.1851	.2174	.1771	.6789	.0993	.2252	.0650
#1	.5076	2.094	28.77	.4648	.6563	.5765	1.948	.5089	.5209
#2	.5107	2.086	28.76	.4638	.6567	.5841	1.945	.5112	.5207
#3	.5077	2.080	28.67	.4627	.6545	.5786	1.946	.5096	.5202

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2158.2	5761.8	44147.	3816.8
Stddev	3.7	7.1	140.	22.6
%RSD	.17039	.12349	.31681	.59187
#1	2157.1	5753.9	44168.	3842.8
#2	2162.3	5763.8	43997.	3802.3
#3	2155.2	5767.7	44274.	3805.3

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: MP30368-S2 Acquired: 5/18/2016 13:33:33 Type: Unk
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0508	30.92	2.018	2.050	.0502	368.4	.0588	.5048	.2146
Stddev	.0002	.23	.006	.012	.0002	3.6	.0001	.0008	.0010
%RSD	.3059	.7587	.2985	.5867	.4334	.9820	.1753	.1544	.4583
#1	.0507	31.17	2.012	2.064	.0504	372.6	.0588	.5039	.2156
#2	.0508	30.90	2.018	2.041	.0503	365.9	.0589	.5050	.2144
#3	.0510	30.70	2.024	2.045	.0500	366.8	.0587	.5054	.2137

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2613	27.58	33.52	482.9	F22.95	.4673	F116.6	.7314	.4791
Stddev	.0009	.18	.22	2.8	.12	.0008	1.6	.0010	.0008
%RSD	.3324	.6702	.6630	.5736	.5312	.1804	1.409	.1375	.1599
#1	.2607	27.79	33.77	485.9	22.81	.4664	118.5	.7305	.4795
#2	.2609	27.45	33.40	480.5	23.03	.4675	115.7	.7312	.4795
#3	.2623	27.49	33.38	482.2	23.02	.4680	115.6	.7325	.4782

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5004	2.058	28.40	.4583	.6481	.5727	1.919	.5010	.5152
Stddev	.0050	.003	.07	.0012	.0043	.0015	.005	.0016	.0004
%RSD	1.002	.1335	.2588	.2551	.6604	.2706	.2654	.3137	.0760
#1	.4947	2.055	28.33	.4578	.6530	.5709	1.921	.4993	.5156
#2	.5020	2.060	28.40	.4575	.6464	.5734	1.923	.5023	.5150
#3	.5043	2.058	28.48	.4596	.6449	.5737	1.914	.5016	.5149

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2168.1	5787.4	44250.	3804.1
Stddev	8.8	7.1	314.	27.1
%RSD	.40686	.12289	.71020	.71337
#1	2168.6	5792.4	44613.	3773.9
#2	2159.0	5779.2	44083.	3826.3
#3	2176.6	5790.4	44055.	3812.1

Zoom In Zoom Out

Sample Name: FA33957-3 Acquired: 5/18/2016 13:37:50 Type: Unk
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0045	103.1	.0796	.0107	.0047	132.3	.2748	.1481	.0838
Stddev	.0002	.2	.0001	.0002	.0001	.3	.0001	.0002	.0002
%RSD	5.155	.1899	.0951	2.109	1.720	.2302	.0502	.1425	.2869
#1	.0043	103.1	.0796	.0104	.0047	132.1	.2748	.1480	.0837
#2	.0046	103.3	.0797	.0109	.0046	132.6	.2746	.1481	.0841
#3	.0047	103.0	.0795	.0107	.0048	132.1	.2749	.1484	.0837

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0755	2.666	41.93	212.2	F9.162	.0175	F172.9	1.129	.0006
Stddev	.0001	.006	.10	.4	.027	.0000	2.0	.002	.0008
%RSD	.0872	.2380	.2498	.2035	.2981	.2141	1.165	.1656	142.6
#1	.0756	2.664	42.03	211.9	9.140	.0176	171.4	1.128	.0011
#2	.0755	2.673	41.94	212.7	9.154	.0175	175.2	1.129	.0010
#3	.0755	2.661	41.82	212.1	9.192	.0175	172.0	1.132	-.0004

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0020	.0178	31.27	-.0007	.2765	.0078	.0031	.5642	3.284
Stddev	.0010	.0015	.08	.0003	.0005	.0001	.0006	.0004	.004
%RSD	49.44	8.462	.2695	47.83	.1821	.6840	18.00	.0680	.1225
#1	-.0009	.0162	31.18	-.0004	.2761	.0078	.0029	.5639	3.288
#2	-.0023	.0192	31.28	-.0006	.2770	.0077	.0037	.5640	3.280
#3	-.0028	.0180	31.35	-.0011	.2763	.0078	.0027	.5646	3.285

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2250.3	6121.3	46159.	3918.4
Stddev	5.2	13.3	147.	32.0
%RSD	.23079	.21655	.31896	.81604
#1	2244.7	6112.4	46231.	3951.2
#2	2254.9	6136.5	46257.	3887.4
#3	2251.1	6114.9	45990.	3916.6

Zoom In Zoom Out

Sample Name: FA33957-4 Acquired: 5/18/2016 13:42:08 Type: Unk
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0008	18.97	.0278	.0080	.0006	195.2	.0756	.1244	.0046
Stddev	.0007	.07	.0004	.0000	.0001	1.9	.0001	.0002	.0005
%RSD	87.92	.3494	1.375	.4592	13.34	.9962	.0692	.1318	10.60
#1	.0000	19.04	.0279	.0081	.0006	197.4	.0756	.1242	.0043
#2	.0010	18.94	.0274	.0081	.0007	194.4	.0755	.1245	.0044
#3	.0014	18.92	.0281	.0080	.0006	193.8	.0756	.1244	.0052

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0198	.0771	19.33	158.5	F7.942	-.0021	F104.7	.6446	.0013
Stddev	.0000	.0019	.09	1.0	.025	.0001	.6	.0008	.0003
%RSD	.1206	2.464	.4820	.6009	.3148	3.328	.5734	.1262	25.84
#1	.0198	.0779	19.43	159.6	7.918	-.0020	105.4	.6438	.0009
#2	.0198	.0784	19.27	158.1	7.940	-.0020	104.4	.6454	.0016
#3	.0198	.0749	19.27	157.8	7.968	-.0022	104.3	.6446	.0015

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0018	.0076	50.95	-.0009	.2177	.0012	.0037	.0093	.4731
Stddev	.0010	.0019	.04	.0001	.0009	.0001	.0001	.0002	.0002
%RSD	54.89	25.49	.0838	10.68	.4198	12.31	3.727	2.479	.0397
#1	-.0024	.0091	50.99	-.0010	.2187	.0011	.0039	.0096	.4730
#2	-.0024	.0084	50.91	-.0009	.2169	.0011	.0036	.0093	.4729
#3	-.0007	.0054	50.96	-.0008	.2175	.0013	.0037	.0091	.4733

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2335.0	6102.5	47589.	3985.0
Stddev	2.8	8.3	86.	21.3
%RSD	.11784	.13559	.18050	.53385
#1	2338.1	6108.6	47678.	3963.1
#2	2333.1	6093.1	47581.	3986.2
#3	2333.8	6105.8	47507.	4005.6

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/18/2016 13:46:30 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2551	40.79	2.041	2.061	2.039	41.30	2.058	2.056	2.036	2.033
Stddev	.0004	.16	.004	.009	.009	.16	.004	.003	.004	.004
%RSD	.1528	.4020	.1709	.4339	.4664	.3920	.1843	.1225	.2017	.1860
#1	.2551	40.88	2.037	2.061	2.039	41.36	2.054	2.053	2.031	2.030
#2	.2547	40.60	2.044	2.053	2.029	41.12	2.061	2.058	2.038	2.032
#3	.2555	40.89	2.042	2.071	2.048	41.42	2.060	2.058	2.039	2.037
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	42.89	40.68	40.88	2.083	2.056	39.51	2.058	2.012	2.037	2.030
Stddev	.18	.21	.22	.002	.006	.21	.003	.002	.001	.005
%RSD	.4101	.5066	.5385	.0987	.3056	.5359	.1358	.1101	.0461	.2618
#1	42.90	40.71	40.95	2.080	2.048	39.51	2.056	2.014	2.036	2.026
#2	42.70	40.46	40.63	2.083	2.058	39.29	2.061	2.010	2.038	2.036
#3	43.05	40.87	41.06	2.084	2.060	39.71	2.057	2.012	2.037	2.028
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.123	2.069	2.080	2.085	2.044	2.044	2.046
Stddev	.005	.001	.008	.002	.003	.004	.004
%RSD	.2205	.0566	.3832	.1141	.1565	.1924	.1803
#1	2.125	2.068	2.079	2.083	2.047	2.039	2.042
#2	2.127	2.070	2.072	2.083	2.041	2.046	2.049
#3	2.118	2.069	2.088	2.087	2.045	2.046	2.047
Check ?	None	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass
Value							
Range							

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/18/2016 13:46:30 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2364.8	6057.0	47480.	3818.5
Stddev	4.3	16.9	227.	26.0
%RSD	.18263	.27825	.47854	.68116
#1	2363.5	6075.1	47709.	3798.0
#2	2369.6	6054.3	47255.	3847.7
#3	2361.2	6041.7	47476.	3809.7

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/18/2016 13:50:26 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0049	.0008	-.0005	-.0004	-.0105	-.0001	-.0001
Stddev	.0001	.0071	.0008	.0002	.0001	.0020	.0000	.0001
%RSD	64.19	144.7	103.1	43.31	29.82	18.99	39.60	182.8
#1	.0002	.0082	.0013	-.0007	-.0003	-.0093	-.0001	-.0001
#2	.0001	.0097	.0013	-.0003	-.0005	-.0128	-.0002	-.0001
#3	.0002	-.0032	-.0002	-.0004	-.0003	-.0095	-.0001	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0004	-.0004	.0055	.1564	-.0082	.0000	.0007	.1329
Stddev	.0003	.0002	.0063	.0258	.0392	.000	.0005	.0077
%RSD	81.15	44.70	114.7	16.49	479.4	309.0	73.14	5.824
#1	-.0006	-.0002	.0127	.1266	.0363	.0000	.0012	.1291
#2	.0000	-.0006	.0007	.1723	-.0234	.0000	.0004	.1277
#3	-.0005	-.0004	.0031	.1703	-.0375	.0000	.0003	.1418
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	F-.0013	-.0013	.0007	.0010	-.0004	-.0003	.0004
Stddev	.0000	.0005	.0011	.0011	.0004	.0002	.0001	.0001
%RSD	26.02	38.50	85.86	160.4	35.74	55.08	37.66	24.49
#1	-.0001	-.0008	-.0001	-.0001	.0014	-.0005	-.0003	.0005
#2	-.0001	-.0013	-.0017	.0003	.0006	-.0002	-.0002	.0004
#3	-.0002	-.0018	-.0022	.0019	.0011	-.0006	-.0003	.0003
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit		.0010						
Low Limit		-.0010						

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/18/2016 13:50:26 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	-.0004	-.0004	-.0004
Stddev	.0005	.0001	.0001
%RSD	124.3	39.84	18.80
#1	.0002	-.0005	-.0004
#2	-.0008	-.0002	-.0004
#3	-.0006	-.0004	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2751.6	6388.2	49915.	3833.5
Stddev	.8	3.1	152.	11.4
%RSD	.03073	.04928	.30383	.29704
#1	2751.4	6389.6	50078.	3823.4
#2	2750.9	6384.6	49779.	3831.1
#3	2752.6	6390.4	49887.	3845.8

Zoom In Zoom Out

Sample Name: ICV Acquired: 5/18/2016 14:24:19 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2496	42.00	2.018	2.119	2.102	42.95	2.052	2.070	2.081	2.042
Stddev	.0010	.07	.013	.005	.006	.08	.014	.014	.002	.004
%RSD	.4125	.1676	.6643	.2440	.2960	.1927	.6736	.6938	.0739	.1910
#1	.2501	42.07	2.031	2.122	2.106	43.01	2.067	2.085	2.083	2.042
#2	.2503	41.93	2.017	2.113	2.095	42.86	2.048	2.067	2.080	2.046
#3	.2484	42.01	2.005	2.121	2.105	43.00	2.040	2.057	2.081	2.038
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.52	42.72	43.43	2.118	1.910	43.21	2.078	2.047	2.036	2.059
Stddev	.08	.07	.14	.003	.012	.11	.014	.015	.016	.012
%RSD	.1959	.1612	.3198	.1453	.6040	.2456	.6558	.7280	.7927	.5872
#1	41.54	42.80	43.59	2.121	1.923	43.33	2.092	2.064	2.053	2.071
#2	41.44	42.67	43.35	2.116	1.907	43.12	2.075	2.039	2.035	2.057
#3	41.60	42.70	43.36	2.117	1.900	43.18	2.065	2.037	2.020	2.047
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0812	2.045	1.980	1.987	2.120	1.930	2.076
Stddev	.0007	.013	.006	.004	.018	.000	.013
%RSD	.8511	.6273	.3069	.1916	.8517	.0179	.6280
#1	.0819	2.059	1.985	1.990	2.141	1.930	2.090
#2	.0813	2.043	1.973	1.987	2.110	1.930	2.073
#3	.0805	2.033	1.983	1.983	2.110	1.930	2.064
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: ICV Acquired: 5/18/2016 14:24:19 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2369.8	6094.4	46876.	3790.0
Stddev	12.0	28.4	307.	21.8
%RSD	.50730	.46597	.65499	.57581
#1	2355.9	6062.9	46897.	3771.8
#2	2377.5	6102.2	47173.	3783.9
#3	2375.9	6118.0	46560.	3814.2

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/18/2016 14:30:38 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2514	40.72	2.008	2.020	2.032	40.97	2.038	2.031	2.037	2.023
Stddev	.0008	.10	.003	.005	.006	.10	.002	.001	.003	.005
%RSD	.2994	.2541	.1308	.2487	.2869	.2367	.0848	.0509	.1518	.2287
#1	.2506	40.84	2.007	2.025	2.036	41.07	2.039	2.031	2.040	2.018
#2	.2521	40.65	2.011	2.015	2.025	40.87	2.038	2.032	2.036	2.028
#3	.2515	40.67	2.006	2.021	2.034	40.98	2.036	2.030	2.034	2.022
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	42.12	40.86	41.12	2.059	2.029	41.07	2.035	2.007	2.007	2.012
Stddev	.11	.13	.11	.002	.003	.12	.002	.002	.001	.003
%RSD	.2570	.3067	.2704	.0827	.1312	.2929	.0856	.0914	.0691	.1605
#1	42.20	40.98	41.21	2.059	2.025	41.21	2.035	2.008	2.006	2.009
#2	41.99	40.73	40.99	2.057	2.030	40.97	2.037	2.005	2.008	2.014
#3	42.15	40.88	41.15	2.060	2.030	41.03	2.033	2.008	2.006	2.015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.081	2.054	2.039	2.064	2.023	2.040	2.040
Stddev	.002	.002	.008	.004	.003	.002	.002
%RSD	.0907	.0900	.3910	.1673	.1294	.1054	.1018
#1	2.080	2.055	2.047	2.060	2.026	2.040	2.042
#2	2.083	2.056	2.031	2.065	2.021	2.037	2.041
#3	2.080	2.052	2.040	2.066	2.022	2.041	2.038
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/18/2016 14:30:38 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2363.4	6084.6	47352.	3808.1
Stddev	2.8	7.3	21.	13.5
%RSD	.11682	.12036	.04369	.35533
#1	2365.2	6086.4	47329.	3816.3
#2	2360.3	6076.5	47358.	3792.5
#3	2364.9	6090.8	47369.	3815.5

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/18/2016 14:38:22 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0112	.0010	.0007	.0006	.0120	.0002	.0002	.0005	.0002
Stddev	.0002	.0150	.0002	.0001	.0001	.0036	.0001	.0001	.0001	.0001
%RSD	82.78	133.7	25.21	19.23	23.08	29.55	41.40	46.37	17.77	39.80
#1	-.0001	.0258	.0011	.0009	.0007	.0142	.0003	.0003	.0004	.0001
#2	-.0002	.0119	.0011	.0006	.0007	.0139	.0002	.0002	.0006	.0002
#3	-.0005	-.0041	.0007	.0006	.0005	.0079	.0001	.0002	.0005	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0174	.0700	.0279	.0003	.0009	-.0103	.0003	-.0003	.0010	-.0009
Stddev	.0050	.0202	.0029	.0000	.0000	.0073	.0001	.0004	.0004	.0011
%RSD	28.76	28.93	10.31	11.65	2.182	70.90	41.41	104.1	38.23	125.5
#1	.0221	.0548	.0309	.0004	.0009	-.0022	.0005	.0000	.0014	.0003
#2	.0180	.0929	.0252	.0003	.0009	-.0163	.0002	-.0004	.0007	-.0011
#3	.0121	.0621	.0275	.0003	.0009	-.0125	.0003	-.0007	.0008	-.0019
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0004	.0005	.0007	.0015	.0006	.0002
Stddev	.0006	.0001	.0001	.0001	.0002	.0002	.0001
%RSD	138.1	29.14	30.52	17.09	14.04	28.67	34.30
#1	.0006	.0005	.0005	.0009	.0014	.0007	.0003
#2	-.0002	.0003	.0006	.0007	.0017	.0007	.0002
#3	.0009	.0003	.0003	.0007	.0013	.0004	.0001
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/18/2016 14:38:22 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2791.3	6456.2	50543.	3904.3
Stddev	5.5	14.5	206.	32.5
%RSD	.19859	.22401	.40812	.83280
#1	2797.4	6472.4	50718.	3871.2
#2	2789.8	6451.9	50315.	3905.3
#3	2786.6	6444.4	50594.	3936.2

Zoom In Zoom Out

Sample Name: FA33957-5 Acquired: 5/18/2016 14:42:07 Type: Unk
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0042	101.4	.0801	.0111	.0055	130.0	.2731	.1471	.0836
Stddev	.0002	.4	.0006	.0001	.0001	.6	.0004	.0003	.0000
%RSD	5.391	.4223	.6871	1.024	1.940	.4717	.1290	.2354	.0340
#1	.0042	101.3	.0806	.0111	.0055	129.6	.2732	.1473	.0836
#2	.0044	101.9	.0802	.0112	.0056	130.7	.2727	.1467	.0837
#3	.0039	101.1	.0795	.0110	.0054	129.6	.2734	.1472	.0836

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0755	2.622	42.17	213.5	F9.055	.0194	F181.1	1.126	.0009
Stddev	.0003	.009	.26	1.2	.110	.0001	5.0	.002	.0006
%RSD	.4275	.3510	.6168	.5623	1.214	.5677	2.772	.1452	75.70
#1	.0757	2.611	42.04	213.0	9.144	.0195	181.7	1.127	.0002
#2	.0756	2.628	42.47	214.9	8.932	.0195	185.8	1.124	.0009
#3	.0751	2.626	42.00	212.7	9.089	.0193	175.8	1.126	.0015

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0027	.0163	31.00	-.0002	.2699	.0089	.0047	.5640	3.286
Stddev	.0009	.0019	.05	.0002	.0005	.0002	.0016	.0011	.005
%RSD	34.99	11.84	.1636	125.1	.1966	2.501	34.16	.2031	.1454
#1	.0030	.0142	31.01	-.0002	.2696	.0090	.0057	.5649	3.288
#2	.0035	.0180	30.94	.0001	.2705	.0087	.0056	.5644	3.281
#3	.0017	.0166	31.04	-.0004	.2696	.0091	.0028	.5627	3.290

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2255.5	6139.5	46344.	3900.0
Stddev	1.5	6.8	288.	55.8
%RSD	.06834	.11012	.62091	1.4300
#1	2255.2	6133.5	46059.	3930.7
#2	2257.2	6146.8	46634.	3835.6
#3	2254.2	6138.3	46341.	3933.7

Zoom In Zoom Out

Sample Name: FA33957-6 Acquired: 5/18/2016 14:46:26 Type: Unk
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0001	.3609	.0051	.0688	.0002	203.6	.0003	.0001	.0053
Stddev	.0003	.0095	.0005	.0003	.0001	1.3	.0000	.0001	.0002
%RSD	277.2	2.629	9.348	.4348	28.33	.6482	9.812	75.87	4.167
#1	.0000	.3533	.0057	.0689	.0002	205.2	.0003	.0001	.0051
#2	.0005	.3579	.0050	.0684	.0003	203.0	.0003	.0003	.0052
#3	-.0001	.3716	.0048	.0690	.0002	202.8	.0003	.0001	.0056

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0022	.2924	4.531	49.21	.0128	.0246	F88.54	.0028	.0004
Stddev	.0003	.0063	.020	.07	.0002	.0001	.23	.0003	.0003
%RSD	11.92	2.170	.4448	.1446	1.700	.2118	.2653	8.962	75.95
#1	.0021	.2996	4.512	49.24	.0127	.0246	88.46	.0031	.0007
#2	.0020	.2903	4.528	49.13	.0126	.0246	88.35	.0028	.0002
#3	.0025	.2874	4.552	49.26	.0130	.0245	88.80	.0026	.0002

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0024	.0062	10.45	-.0002	.3915	.0121	.0002	.0091	.0110
Stddev	.0008	.0009	.04	.0001	.0012	.0011	.0009	.0002	.0000
%RSD	31.21	14.01	.3624	47.10	.2982	8.876	378.7	2.118	.2091
#1	.0033	.0072	10.41	-.0002	.3907	.0134	.0009	.0092	.0110
#2	.0021	.0057	10.45	-.0003	.3910	.0115	.0005	.0093	.0110
#3	.0019	.0057	10.49	-.0001	.3928	.0115	-.0007	.0089	.0110

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2401.8	6027.9	46780.	3892.9
Stddev	.9	7.6	329.	22.6
%RSD	.03910	.12544	.70355	.58053
#1	2400.7	6030.1	46702.	3900.3
#2	2402.2	6034.2	46497.	3910.9
#3	2402.5	6019.5	47142.	3867.6

Zoom In Zoom Out

Sample Name: FA33957-7 Acquired: 5/18/2016 14:50:39 Type: Unk
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0003	.0253	.0017	.0005	.0002	.1062	.0002	.0000	.0006	.0006
Stddev	.0002	.0028	.0006	.0002	.0000	.0075	.0001	.0002	.0001	.0004
%RSD	69.34	10.99	37.54	32.41	17.68	7.047	38.82	1181.	21.41	62.30
#1	-.0001	.0257	.0013	.0006	.0001	.1060	.0002	.0000	.0007	.0002
#2	-.0003	.0279	.0024	.0006	.0002	.0988	.0001	.0002	.0005	.0008
#3	-.0006	.0223	.0013	.0003	.0002	.1137	.0003	-.0002	.0006	.0008

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0214	.0915	.0270	.0007	.0002	.1084	.0005	-.0009	.0017	-.0007
Stddev	.0020	.0166	.0236	.0000	.0001	.0058	.0001	.0005	.0003	.0002
%RSD	9.538	18.20	87.41	3.089	43.93	5.339	16.24	56.85	19.67	31.77
#1	.0227	.0951	.0043	.0007	.0002	.1148	.0005	-.0011	.0021	-.0009
#2	.0224	.1060	.0515	.0007	.0001	.1068	.0006	-.0013	.0016	-.0006
#3	.0190	.0733	.0254	.0007	.0003	.1036	.0004	-.0003	.0014	-.0005

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0319	.0002	.0002	.0011	-.0004	.0001	.0064
Stddev	.0008	.0003	.0001	.0001	.0005	.0000	.0001
%RSD	2.401	114.7	58.31	8.682	139.6	27.90	1.148
#1	.0319	.0001	.0001	.0011	.0001	.0001	.0064
#2	.0326	.0000	.0003	.0010	-.0010	.0001	.0063
#3	.0311	.0005	.0002	.0012	-.0002	.0001	.0064

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2824.7	6567.3	51179.	3938.0
Stddev	6.0	12.1	133.	37.7
%RSD	.21097	.18463	.25929	.95699
#1	2819.1	6558.1	51326.	3975.1
#2	2824.1	6562.7	51144.	3939.3
#3	2830.9	6581.1	51068.	3899.7

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: FA33957-8 Acquired: 5/18/2016 14:54:48 Type: Unk
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0050	245.9	.0787	.0287	.0081	F548.9	.5209	.1648	.1002
Stddev	.0005	.9	.0002	.0002	.0000	5.8	.0002	.0002	.0006
%RSD	9.668	.3549	.2914	.6690	.4452	1.066	.0347	.1429	.6430
#1	.0047	245.2	.0787	.0289	.0080	542.4	.5209	.1649	.1005
#2	.0046	246.9	.0789	.0285	.0081	550.5	.5207	.1645	.0995
#3	.0055	245.5	.0785	.0287	.0081	553.7	.5211	.1649	.1006

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0350	209.2	F159.2	210.9	F6.824	.0190	F216.1	.8370	.0059
Stddev	.0002	.3	.4	.7	.025	.0001	3.4	.0004	.0002
%RSD	.5124	.1568	.2459	.3304	.3604	.6831	1.594	.0527	3.116
#1	.0350	208.8	159.4	210.5	6.812	.0189	220.1	.8371	.0061
#2	.0351	209.4	159.4	211.7	6.852	.0191	214.7	.8366	.0057
#3	.0348	209.3	158.7	210.5	6.807	.0189	213.6	.8374	.0059

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0047	.0050	37.83	.0000	1.851	.0115	.0047	.6876	F4.057
Stddev	.0008	.0024	.02	.000	.006	.0002	.0010	.0018	.003
%RSD	17.35	48.76	.0527	541.7	.3228	1.504	21.02	.2566	.0703
#1	.0047	.0042	37.81	-.0001	1.846	.0113	.0045	.6876	4.057
#2	.0055	.0077	37.85	.0002	1.857	.0116	.0058	.6893	4.054
#3	.0039	.0030	37.82	-.0002	1.849	.0115	.0039	.6858	4.059

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2159.1	5883.0	44386.	3873.5
Stddev	10.9	18.0	58.	11.9
%RSD	.50385	.30528	.13133	.30831
#1	2163.2	5889.4	44453.	3875.8
#2	2167.3	5896.8	44359.	3884.1
#3	2146.8	5862.7	44347.	3860.6

Zoom In Zoom Out

Sample Name: FA33957-9 Acquired: 5/18/2016 14:59:15 Type: Unk
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0056	256.2	.0870	.1074	.0083	461.9	.5589	.1478	.1029
Stddev	.0004	.2	.0014	.0001	.0001	2.3	.0019	.0004	.0008
%RSD	7.756	.0924	1.666	.1252	.7952	.5048	.3396	.2439	.7654
#1	.0051	255.9	.0859	.1073	.0083	461.0	.5570	.1475	.1020
#2	.0058	256.4	.0865	.1076	.0082	460.1	.5589	.1477	.1030
#3	.0058	256.2	.0887	.1073	.0083	464.5	.5608	.1482	.1036

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0649	176.1	F160.7	213.4	F6.394	.0164	F207.2	.9269	.0058
Stddev	.0003	.4	.5	.2	.028	.0001	3.1	.0029	.0016
%RSD	.4553	.2257	.3049	.1155	.4314	.9125	1.477	.3167	27.19
#1	.0650	176.5	161.1	213.5	6.366	.0165	209.4	.9247	.0040
#2	.0646	176.0	160.7	213.6	6.395	.0162	203.7	.9257	.0068
#3	.0652	175.8	160.2	213.1	6.421	.0164	208.4	.9302	.0065

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0020	.0057	30.12	-.0005	2.225	.0076	.0078	.7313	F4.518
Stddev	.0005	.0006	.10	.0003	.001	.0001	.0019	.0045	.014
%RSD	24.77	11.19	.3366	62.62	.0586	.8926	24.27	.6199	.3033
#1	.0025	.0055	30.04	-.0008	2.224	.0076	.0065	.7262	4.503
#2	.0020	.0064	30.08	-.0004	2.226	.0075	.0100	.7331	4.519
#3	.0015	.0052	30.23	-.0002	2.224	.0077	.0070	.7348	4.530

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2182.2	6090.2	45557.	4006.2
Stddev	6.0	12.9	358.	7.9
%RSD	.27298	.21150	.78592	.19637
#1	2189.1	6105.0	45845.	3999.4
#2	2178.7	6082.7	45670.	4014.8
#3	2178.9	6082.7	45156.	4004.4

Zoom In Zoom Out

Sample Name: FA33957-10 Acquired: 5/18/2016 15:03:40 Type: Unk
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0001	115.6	.1126	.0199	.0031	451.9	.6359	.1965	.0155
Stddev	.0005	.2	.0003	.0001	.0001	1.2	.0006	.0002	.0002
%RSD	416.8	.1712	.2579	.2640	1.963	.2648	.0945	.0937	1.387
#1	-.0001	115.4	.1123	.0199	.0031	451.0	.6365	.1967	.0154
#2	.0007	115.7	.1129	.0199	.0031	453.2	.6359	.1964	.0153
#3	-.0003	115.7	.1126	.0200	.0030	451.4	.6353	.1964	.0157

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0343	99.96	F156.6	304.3	F6.671	.0059	F295.5	2.076	.0035
Stddev	.0000	.29	.5	1.1	.052	.0002	4.4	.002	.0003
%RSD	.1402	.2861	.3076	.3511	.7825	3.054	1.478	.0958	7.308
#1	.0343	99.86	157.1	303.3	6.631	.0057	299.9	2.078	.0035
#2	.0342	99.74	156.2	304.1	6.730	.0059	291.2	2.075	.0037
#3	.0343	100.3	156.3	305.4	6.651	.0060	295.3	2.075	.0032

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0018	.0013	28.68	-.0005	.5613	.0058	.0059	.1297	F5.366
Stddev	.0005	.0011	.03	.0000	.0004	.0002	.0009	.0007	.006
%RSD	26.32	79.31	.1123	2.637	.0738	2.820	15.45	.5353	.1207
#1	.0013	.0015	28.71	-.0005	.5616	.0059	.0068	.1304	5.372
#2	.0020	.0002	28.65	-.0005	.5609	.0056	.0060	.1299	5.365
#3	.0022	.0023	28.66	-.0005	.5615	.0058	.0050	.1290	5.359

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2132.7	5978.2	44164.	3873.6
Stddev	5.4	7.7	192.	38.9
%RSD	.25444	.12897	.43437	1.0031
#1	2130.7	5970.2	44265.	3909.9
#2	2138.8	5978.7	43943.	3878.3
#3	2128.5	5985.6	44284.	3832.6

Zoom In Zoom Out

Sample Name: FA33957-11 Acquired: 5/18/2016 15:08:07 Type: Unk
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0171	135.0	.2878	.0027	.0176	F694.6	1.691	.2351	.2150
Stddev	.0002	.3	.0003	.0001	.0001	1.7	.001	.0003	.0006
%RSD	.9492	.2176	.1142	4.615	.5652	.2394	.0793	.1214	.2592
#1	.0173	135.3	.2881	.0028	.0176	693.1	1.691	.2350	.2149
#2	.0171	134.8	.2879	.0026	.0175	694.3	1.689	.2348	.2156
#3	.0170	134.9	.2875	.0027	.0177	696.4	1.692	.2354	.2145

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0255	70.81	F113.6	390.9	F14.01	.0199	F295.0	2.992	.0051
Stddev	.0002	.18	.5	.3	.05	.0002	3.7	.002	.0003
%RSD	.9784	.2532	.4702	.0809	.3740	1.236	1.250	.0675	5.352
#1	.0256	71.02	114.2	390.8	13.97	.0196	297.8	2.994	.0048
#2	.0257	70.69	113.6	390.6	13.99	.0201	296.3	2.990	.0054
#3	.0252	70.72	113.1	391.2	14.07	.0200	290.8	2.992	.0050

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0023	.0058	39.09	-.0005	.8127	.0006	.0019	2.234	F17.20
Stddev	.0013	.0009	.03	.0002	.0023	.0001	.0010	.003	.01
%RSD	57.56	16.00	.0672	45.71	.2835	9.148	51.33	.1311	.0382
#1	-.0009	.0056	39.12	-.0007	.8151	.0006	.0015	2.233	17.21
#2	-.0025	.0050	39.08	-.0003	.8105	.0007	.0012	2.237	17.20
#3	-.0035	.0069	39.08	-.0006	.8126	.0006	.0031	2.231	17.19

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2054.1	5829.3	42601.	3817.6
Stddev	8.4	7.2	112.	20.4
%RSD	.40730	.12311	.26193	.53351
#1	2058.8	5831.6	42721.	3841.1
#2	2059.1	5835.1	42584.	3805.7
#3	2044.5	5821.3	42499.	3805.9

Zoom In Zoom Out

Sample Name: FA33957-12 Acquired: 5/18/2016 15:12:43 Type: Unk
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0002	.4114	.3164	.0033	.0002	276.2	.0361	.2046	.0201
Stddev	.0004	.0111	.0013	.0002	.0001	1.2	.0001	.0002	.0002
%RSD	197.6	2.709	.4047	5.570	73.29	.4364	.2082	.1177	.8665
#1	.0000	.4029	.3177	.0032	.0001	276.3	.0362	.2046	.0203
#2	-.0007	.4240	.3152	.0033	.0001	277.3	.0361	.2049	.0201
#3	.0001	.4074	.3163	.0035	.0003	274.9	.0361	.2044	.0200

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0016	44.06	78.66	481.3	F7.558	.0049	F322.0	2.802	.0022
Stddev	.0002	.22	.54	1.7	.007	.0001	1.6	.003	.0004
%RSD	10.88	.5102	.6871	.3583	.0939	2.270	.4959	.0961	16.74
#1	.0014	44.32	79.28	483.3	7.562	.0048	320.2	2.805	.0018
#2	.0017	43.93	78.37	480.8	7.550	.0048	322.5	2.800	.0022
#3	.0017	43.93	78.32	479.9	7.563	.0050	323.2	2.801	.0025

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0006	.0027	40.47	-.0004	.0591	.0136	.0027	.0063	.4776
Stddev	.0003	.0011	.04	.0002	.0005	.0008	.0001	.0001	.0007
%RSD	47.21	43.09	.0967	45.18	.8048	5.923	4.770	2.001	.1362
#1	-.0008	.0040	40.51	-.0003	.0597	.0134	.0028	.0065	.4782
#2	-.0008	.0018	40.43	-.0002	.0588	.0128	.0025	.0063	.4777
#3	-.0003	.0023	40.47	-.0006	.0589	.0144	.0027	.0062	.4769

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2120.7	5770.7	43065.	3733.4
Stddev	3.4	4.0	191.	10.1
%RSD	.16211	.06911	.44465	.27066
#1	2118.7	5768.9	42895.	3740.6
#2	2118.7	5768.0	43027.	3737.7
#3	2124.7	5775.3	43273.	3721.8

Zoom In Zoom Out

Sample Name: FA33957-13 Acquired: 5/18/2016 15:17:12 Type: Unk
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0008	.8417	.2001	.0060	.0001	73.31	.0028	.0566	.0109
Stddev	.0006	.0086	.0016	.0002	.0001	.15	.0000	.0002	.0002
%RSD	72.85	1.027	.7827	4.070	56.28	.2033	1.114	.3195	1.498
#1	-.0008	.8398	.1988	.0062	.0001	73.41	.0029	.0565	.0111
#2	-.0002	.8512	.1996	.0057	.0002	73.37	.0028	.0565	.0107
#3	-.0014	.8342	.2018	.0060	.0002	73.14	.0029	.0568	.0109

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0093	7.925	20.08	375.4	F4.404	.0265	F135.9	.3474	.0021
Stddev	.0001	.022	.06	1.0	.012	.0000	3.3	.0014	.0004
%RSD	1.350	.2758	.2790	.2718	.2794	.1111	2.411	.4048	18.63
#1	.0093	7.931	20.15	375.9	4.389	.0265	133.9	.3461	.0024
#2	.0092	7.943	20.05	376.0	4.412	.0265	139.7	.3471	.0017
#3	.0094	7.900	20.05	374.2	4.409	.0265	134.1	.3489	.0023

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0009	.0024	48.38	-.0003	.0161	.0520	.0020	.0054	.0505
Stddev	.0002	.0009	.21	.0003	.0001	.0017	.0003	.0003	.0003
%RSD	27.75	37.65	.4313	99.82	.6510	3.186	16.53	5.759	.5472
#1	.0011	.0032	48.19	-.0004	.0163	.0538	.0024	.0053	.0503
#2	.0007	.0025	48.34	.0000	.0161	.0506	.0017	.0058	.0504
#3	.0008	.0014	48.60	-.0006	.0161	.0515	.0019	.0052	.0508

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2270.0	6157.6	45668.	3815.1
Stddev	9.7	27.7	180.	28.4
%RSD	.42855	.44976	.39342	.74356
#1	2277.1	6181.4	45512.	3837.4
#2	2274.0	6164.3	45628.	3783.2
#3	2258.9	6127.2	45865.	3824.8

Zoom In Zoom Out

Sample Name: FA33957-14 Acquired: 5/18/2016 15:21:32 Type: Unk
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0253	134.1	.1210	.0781	.0158	F631.1	.9927	.0640	.9172
Stddev	.0001	.4	.0013	.0001	.0000	15.8	.0010	.0002	.0026
%RSD	.4297	.2659	1.075	.1756	.2525	2.504	.1012	.3065	.2862
#1	.0252	134.5	.1220	.0782	.0158	634.7	.9936	.0642	.9183
#2	.0255	133.8	.1196	.0781	.0157	613.8	.9916	.0639	.9190
#3	.0253	134.1	.1215	.0779	.0158	644.8	.9928	.0639	.9142

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.5657	17.85	F102.9	139.0	F4.653	.0455	F221.9	1.512	.0043
Stddev	.0010	.09	.3	.7	.036	.0002	4.5	.002	.0008
%RSD	.1777	.5167	.3058	.5061	.7819	.4005	2.023	.1490	19.22
#1	.5654	17.82	103.3	139.6	4.623	.0457	224.6	1.514	.0035
#2	.5669	17.78	102.7	138.3	4.693	.0454	216.7	1.509	.0051
#3	.5650	17.96	102.9	139.1	4.642	.0454	224.3	1.513	.0044

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0060	.0249	40.79	-.0007	1.554	.1046	-.0088	3.314	F10.54
Stddev	.0004	.0014	.03	.0000	.002	.0001	.0015	.009	.02
%RSD	6.140	5.563	.0678	3.694	.1468	.1182	16.82	.2611	.1474
#1	.0064	.0233	40.80	-.0008	1.556	.1045	-.0075	3.318	10.55
#2	.0057	.0257	40.76	-.0007	1.553	.1045	-.0084	3.319	10.52
#3	.0060	.0257	40.82	-.0007	1.552	.1047	-.0104	3.304	10.54

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2099.6	6091.1	44902.	3985.6
Stddev	2.0	7.2	220.	62.1
%RSD	.09621	.11840	.49051	1.5593
#1	2098.1	6087.3	44847.	3962.6
#2	2101.9	6099.4	44714.	4055.9
#3	2098.8	6086.5	45144.	3938.2

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/18/2016 15:25:57 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2536	41.31	1.995	2.019	2.044	41.72	2.045	2.036	2.081	2.044
Stddev	.0004	.13	.002	.009	.004	.11	.002	.002	.007	.005
%RSD	.1419	.3046	.1138	.4525	.2158	.2562	.0837	.0745	.3241	.2288
#1	.2539	41.32	1.998	2.016	2.044	41.72	2.046	2.038	2.083	2.041
#2	.2538	41.18	1.995	2.012	2.039	41.62	2.045	2.036	2.087	2.049
#3	.2532	41.43	1.993	2.029	2.048	41.83	2.043	2.035	2.074	2.041
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	42.47	40.50	41.26	2.080	2.022	39.89	2.020	2.024	1.999	1.996
Stddev	.26	.11	.04	.007	.002	.11	.003	.002	.003	.005
%RSD	.6133	.2698	.0882	.3601	.1208	.2715	.1503	.0743	.1694	.2444
#1	42.41	40.51	41.24	2.083	2.020	39.93	2.023	2.023	1.999	2.000
#2	42.25	40.40	41.25	2.085	2.022	39.76	2.021	2.024	2.002	1.996
#3	42.76	40.61	41.31	2.071	2.025	39.97	2.017	2.026	1.996	1.991
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.095	2.021	2.063	2.091	2.042	2.048	2.046
Stddev	.007	.006	.006	.005	.005	.006	.003
%RSD	.3188	.2939	.3083	.2497	.2426	.2888	.1381
#1	2.102	2.027	2.064	2.093	2.040	2.046	2.047
#2	2.093	2.022	2.057	2.095	2.039	2.054	2.047
#3	2.089	2.015	2.070	2.085	2.048	2.043	2.042
Check ?	None	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass
Value								
Range								

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/18/2016 15:25:57 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2363.1	6132.2	46853.	3777.2
Stddev	3.5	1.0	436.	12.3
%RSD	.14801	.01658	.93024	.32501
#1	2366.0	6133.2	46706.	3774.1
#2	2364.0	6132.2	46510.	3790.7
#3	2359.2	6131.2	47343.	3766.8

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/18/2016 15:29:52 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0057	.0015	.0003	.0002	.0068	.0001	.0002	-.0001
Stddev	.0002	.0017	.0004	.0002	.0001	.0048	.0000	.0001	.0002
%RSD	76.95	29.56	27.81	69.42	33.15	70.14	22.29	51.10	227.6
#1	-.0003	.0047	.0017	.0004	.0002	.0121	.0001	.0002	-.0002
#2	-.0005	.0048	.0017	.0003	.0003	.0055	.0001	.0003	-.0002
#3	.0000	.0077	.0010	.0001	.0002	.0028	.0001	.0001	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0334	.1219	.0147	.0002	F.0024	.0933	.0000	.0001
Stddev	.0002	.0075	.0114	.0173	.0001	.0006	.0064	.000	.0001
%RSD	192.0	22.46	9.344	117.8	33.93	24.53	6.832	214.3	104.5
#1	-.0004	.0420	.1135	-.0053	.0002	.0031	.0919	.0000	.0000
#2	.0001	.0286	.1174	.0251	.0001	.0022	.0878	.0000	.0002
#3	-.0001	.0295	.1349	.0243	.0001	.0019	.1003	-.0001	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0016	.0001	.0063	.0003	.0000	.0018	.0002	.0004	.0001
Stddev	.0008	.0009	.0004	.0001	.0001	.0001	.0007	.0002	.0000
%RSD	49.52	897.7	6.331	47.34	323.2	4.727	384.4	42.11	12.03
#1	.0010	.0009	.0063	.0002	.0000	.0019	.0007	.0007	.0001
#2	.0026	-.0008	.0067	.0003	.0000	.0018	.0005	.0003	.0001
#3	.0013	.0001	.0059	.0004	.0001	.0017	-.0006	.0004	.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/18/2016 15:29:52 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2746.2	6441.6	49017.	3764.1
Stddev	7.6	14.2	170.	6.5
%RSD	.27687	.22101	.34645	.17328
#1	2737.5	6425.3	48986.	3764.6
#2	2749.3	6451.7	49200.	3757.4
#3	2751.7	6447.8	48865.	3770.4

Zoom In Zoom Out

Sample Name: FA33957-15 Acquired: 5/18/2016 15:34:02 Type: Unk
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0056	372.0	.1188	.0334	.0131	F503.0	.9200	.1043	.0581
Stddev	.0003	3.9	.0005	.0002	.0001	8.3	.0037	.0005	.0005
%RSD	4.580	1.054	.4173	.6851	.4683	1.642	.3980	.4536	.8813
#1	.0056	371.0	.1190	.0336	.0132	510.2	.9158	.1038	.0575
#2	.0059	368.7	.1192	.0334	.0132	504.9	.9218	.1047	.0584
#3	.0054	376.3	.1182	.0332	.0131	494.0	.9224	.1044	.0584

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0463	89.20	F235.4	182.7	F4.811	.0147	F305.5	1.590	.0051
Stddev	.0002	.47	2.1	.9	.038	.0000	3.9	.007	.0005
%RSD	.3591	.5317	.8924	.4995	.7980	.3263	1.270	.4220	9.693
#1	.0463	89.27	236.7	182.6	4.835	.0148	307.2	1.582	.0056
#2	.0464	89.63	236.5	183.7	4.831	.0147	308.2	1.594	.0046
#3	.0461	88.69	232.9	181.9	4.767	.0147	301.0	1.594	.0052

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0006	.0079	27.63	-.0005	.7052	.0429	.0050	.7675	F8.476
Stddev	.0010	.0034	.16	.0004	.0025	.0013	.0006	.0025	.034
%RSD	169.8	42.51	.5962	80.53	.3607	3.000	11.66	.3255	.4030
#1	-.0002	.0071	27.44	-.0007	.7051	.0434	.0057	.7689	8.436
#2	-.0018	.0050	27.69	.0000	.7078	.0438	.0046	.7690	8.496
#3	.0001	.0116	27.75	-.0008	.7027	.0414	.0048	.7647	8.495

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2111.2	6140.1	44364.	3931.9
Stddev	3.3	14.0	346.	42.1
%RSD	.15827	.22823	.78061	1.0697
#1	2115.0	6155.8	44245.	3964.8
#2	2109.1	6128.8	44093.	3884.5
#3	2109.4	6135.7	44754.	3946.4

Zoom In Zoom Out

Sample Name: FA33957-16 Acquired: 5/18/2016 15:38:38 Type: Unk
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0004	78.96	.0078	.0909	.0024	370.6	.4360	.1140	.0424
Stddev	.0001	.16	.0003	.0004	.0000	4.3	.0008	.0001	.0003
%RSD	25.50	.1980	3.442	.4717	2.013	1.152	.1784	.0792	.7281
#1	.0003	78.97	.0081	.0908	.0024	368.3	.4356	.1139	.0427
#2	.0005	78.79	.0077	.0913	.0024	368.0	.4356	.1141	.0421
#3	.0003	79.10	.0077	.0905	.0023	375.5	.4369	.1140	.0425

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0480	64.89	69.78	162.3	F4.559	.0021	F194.3	1.026	.0074
Stddev	.0006	.09	.11	.4	.035	.0002	2.5	.001	.0004
%RSD	1.234	.1369	.1559	.2361	.7651	8.304	1.277	.0990	5.898
#1	.0483	64.83	69.90	162.5	4.524	.0020	195.4	1.025	.0069
#2	.0473	64.83	69.70	161.8	4.560	.0023	191.5	1.025	.0076
#3	.0482	64.99	69.72	162.4	4.593	.0020	196.1	1.027	.0076

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0018	.0024	28.44	.0002	.4286	.2953	.0024	.1132	F7.013
Stddev	.0010	.0021	.03	.0002	.0011	.0022	.0009	.0002	.009
%RSD	53.49	86.80	.1186	85.30	.2600	.7548	37.85	.1665	.1346
#1	.0007	.0044	28.45	.0003	.4299	.2952	.0034	.1134	7.006
#2	.0022	.0003	28.40	.0004	.4278	.2931	.0018	.1131	7.009
#3	.0024	.0025	28.46	.0000	.4282	.2976	.0019	.1131	7.024

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2202.8	6389.1	47204.	4034.8
Stddev	6.2	9.2	159.	27.0
%RSD	.28002	.14365	.33703	.66807
#1	2207.8	6395.8	47254.	4029.6
#2	2204.7	6392.8	47332.	4064.0
#3	2195.9	6378.6	47026.	4010.8

Zoom In Zoom Out

Sample Name: FA33957-17 Acquired: 5/18/2016 15:43:05 Type: Unk
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0002	2.713	.0134	.0118	.0003	268.8	.0153	.0143	.0036
Stddev	.0006	.027	.0006	.0003	.0000	3.5	.0001	.0001	.0002
%RSD	315.7	1.011	4.462	2.796	15.34	1.312	.3440	.7684	4.886
#1	.0003	2.718	.0133	.0117	.0003	269.1	.0154	.0144	.0036
#2	.0000	2.684	.0129	.0115	.0003	265.1	.0153	.0142	.0038
#3	-.0008	2.738	.0141	.0122	.0002	272.2	.0153	.0144	.0035

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0049	1.806	11.25	107.3	2.400	.0102	F105.9	.0797	.0004
Stddev	.0005	.016	.07	.3	.004	.0001	.4	.0003	.0004
%RSD	10.01	.8624	.5994	.2770	.1670	.7301	.3626	.4031	87.71
#1	.0044	1.824	11.32	107.6	2.398	.0103	106.2	.0795	.0009
#2	.0054	1.796	11.20	107.0	2.405	.0102	106.0	.0795	.0001
#3	.0050	1.797	11.22	107.2	2.398	.0102	105.4	.0801	.0004

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0015	.0046	28.90	-.0002	.1231	.0883	.0016	.0647	.0583
Stddev	.0011	.0004	.01	.0002	.0005	.0030	.0006	.0003	.0002
%RSD	72.62	8.384	.0450	84.30	.4054	3.445	37.77	.4179	.2647
#1	.0019	.0045	28.90	-.0001	.1237	.0867	.0017	.0646	.0584
#2	.0024	.0043	28.89	-.0004	.1227	.0918	.0020	.0650	.0583
#3	.0003	.0050	28.92	-.0002	.1231	.0864	.0009	.0645	.0581

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2312.6	6036.9	45346.	3729.7
Stddev	6.7	11.8	245.	27.0
%RSD	.29098	.19470	.53989	.72387
#1	2310.9	6030.2	45606.	3717.0
#2	2320.0	6050.4	45120.	3760.7
#3	2306.9	6030.0	45313.	3711.5

Zoom In Zoom Out

Sample Name: FA33957-18 Acquired: 5/18/2016 15:47:19 Type: Unk
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0004	5.634	.0473	.0194	.0004	261.3	.0426	.0445	.0102
Stddev	.0004	.042	.0004	.0003	.0000	7.0	.0002	.0001	.0003
%RSD	108.3	.7431	.8775	1.407	6.985	2.695	.3887	.2697	3.122
#1	-.0006	5.673	.0478	.0196	.0004	266.3	.0428	.0444	.0106
#2	-.0006	5.641	.0471	.0195	.0004	264.3	.0425	.0445	.0099
#3	.0001	5.590	.0471	.0191	.0004	253.2	.0425	.0447	.0103

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0137	1.713	13.92	260.9	F7.362	.0020	F103.7	.4246	.0020
Stddev	.0005	.009	.05	.9	.015	.0001	.5	.0003	.0003
%RSD	3.405	.5465	.3903	.3445	.2063	5.375	.5288	.0601	16.98
#1	.0135	1.723	13.98	261.9	7.356	.0021	104.4	.4249	.0016
#2	.0142	1.714	13.91	260.7	7.351	.0020	103.4	.4244	.0022
#3	.0133	1.704	13.87	260.2	7.379	.0019	103.4	.4246	.0021

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0007	.0025	43.67	-.0004	.1515	.0744	.0041	.0511	.3940
Stddev	.0009	.0002	.05	.0002	.0004	.0033	.0005	.0000	.0005
%RSD	120.3	8.910	.1059	59.00	.2825	4.435	13.37	.0509	.1259
#1	.0017	.0023	43.72	-.0002	.1519	.0782	.0036	.0511	.3945
#2	.0005	.0027	43.66	-.0006	.1510	.0719	.0040	.0511	.3939
#3	.0000	.0026	43.62	-.0003	.1516	.0732	.0047	.0511	.3935

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2266.1	6236.8	47313.	3951.6
Stddev	3.8	16.1	151.	45.9
%RSD	.16565	.25794	.31919	1.1621
#1	2261.9	6220.7	47275.	3903.4
#2	2268.9	6236.8	47480.	3956.6
#3	2267.7	6252.9	47185.	3994.9

Zoom In Zoom Out

Sample Name: FA33957-19 Acquired: 5/18/2016 15:51:41 Type: Unk
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0009	.7224	.0297	.0294	.0003	342.1	.0018	.0108	.0030
Stddev	.0006	.0045	.0007	.0001	.0001	4.6	.0000	.0001	.0002
%RSD	68.77	.6217	2.443	.2708	25.09	1.349	1.280	1.306	6.500
#1	-.0011	.7232	.0292	.0294	.0002	336.8	.0018	.0107	.0031
#2	-.0015	.7264	.0293	.0293	.0002	344.5	.0018	.0107	.0027
#3	-.0002	.7175	.0305	.0295	.0003	345.0	.0018	.0109	.0030

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0049	.5939	22.56	238.7	3.641	.0075	F164.9	.1028	.0011
Stddev	.0001	.0027	.05	.8	.023	.0001	1.0	.0004	.0005
%RSD	2.917	.4563	.2214	.3471	.6285	1.778	.6335	.3617	44.60
#1	.0050	.5921	22.52	237.8	3.633	.0074	165.0	.1024	.0016
#2	.0047	.5926	22.62	238.7	3.623	.0076	165.9	.1029	.0006
#3	.0049	.5970	22.56	239.5	3.667	.0076	163.8	.1032	.0012

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0011	.0056	31.14	-.0005	.3888	.0331	.0015	.0148	.0147
Stddev	.0009	.0007	.06	.0002	.0009	.0006	.0009	.0002	.0001
%RSD	82.77	12.67	.2073	52.12	.2386	1.850	59.44	1.418	.4346
#1	.0004	.0051	31.11	-.0005	.3885	.0327	.0005	.0146	.0147
#2	.0022	.0053	31.10	-.0007	.3881	.0328	.0019	.0147	.0146
#3	.0009	.0064	31.22	-.0002	.3899	.0339	.0021	.0150	.0147

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2234.7	5864.9	44538.	3798.7
Stddev	2.9	10.9	299.	32.7
%RSD	.12862	.18616	.67128	.85962
#1	2237.8	5874.0	44657.	3832.0
#2	2232.0	5867.9	44758.	3766.7
#3	2234.4	5852.8	44197.	3797.5

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: FA33957-20 Acquired: 5/18/2016 15:56:13 Type: Unk
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0006	2.782	1.023	.0043	.0009	238.5	.2077	.2708	.0519
Stddev	.0004	.025	.022	.0002	.0001	2.6	.0014	.0007	.0013
%RSD	58.26	.9141	2.128	4.593	10.16	1.077	.6785	.2604	2.530
#1	.0009	2.812	1.000	.0041	.0008	239.0	.2091	.2705	.0506
#2	.0002	2.769	1.024	.0043	.0010	235.7	.2076	.2702	.0521
#3	.0008	2.767	1.044	.0045	.0009	240.7	.2063	.2715	.0532

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.1072	54.38	57.32	F664.1	F4.421	.0332	F237.2	F4.192	.0553
Stddev	.0005	.58	1.35	5.8	.006	.0075	6.0	.044	.0154
%RSD	.4760	1.063	2.360	.8758	.1292	22.49	2.528	1.056	27.87
#1	.1073	55.01	56.00	670.7	4.422	.0257	230.4	4.237	.0394
#2	.1076	54.26	57.27	661.5	4.415	.0332	239.5	4.190	.0562
#3	.1066	53.87	58.70	659.9	4.427	.0407	241.7	4.149	.0702

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0326	.1024	40.99	.0761	.4067	.0053	.0789	.2185	F6.014
Stddev	.0083	.0349	.36	.0228	.0021	.0002	.0251	.0016	.053
%RSD	25.46	34.05	.8764	29.97	.5209	3.083	31.80	.7203	.8744
#1	.0239	.0669	41.36	.0529	.4091	.0054	.0547	.2203	6.062
#2	.0336	.1037	40.96	.0769	.4056	.0054	.0772	.2178	6.023
#3	.0404	.1366	40.64	.0985	.4054	.0051	.1048	.2174	5.958

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1977.8	5536.3	40787.	3651.0
Stddev	16.9	28.2	235.	32.1
%RSD	.85341	.50878	.57613	.87936
#1	1963.5	5520.5	40975.	3684.4
#2	1973.6	5519.6	40862.	3648.0
#3	1996.4	5568.8	40523.	3620.4

Zoom In Zoom Out

Sample Name: FA33957-22 Acquired: 5/18/2016 16:00:37 Type: Unk
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0044	255.0	.0746	.0269	.0079	F566.7	.5103	.1648	.0969
Stddev	.0005	.5	.0003	.0002	.0001	5.2	.0010	.0004	.0010
%RSD	10.72	.2126	.3548	.6825	1.460	.9162	.1971	.2499	1.061
#1	.0049	255.3	.0743	.0271	.0078	569.6	.5100	.1645	.0978
#2	.0040	254.4	.0748	.0267	.0080	569.8	.5096	.1646	.0969
#3	.0042	255.2	.0747	.0270	.0079	560.7	.5115	.1653	.0958

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0303	215.6	F152.3	212.8	F6.913	.0184	F217.8	.8118	.0037
Stddev	.0002	.3	.6	.2	.059	.0002	3.0	.0012	.0004
%RSD	.6155	.1202	.3773	.1001	.8590	1.067	1.397	.1469	9.941
#1	.0301	215.7	152.9	213.1	6.961	.0185	219.9	.8106	.0033
#2	.0304	215.3	151.9	212.7	6.933	.0181	219.1	.8117	.0038
#3	.0304	215.8	151.9	212.7	6.847	.0185	214.3	.8130	.0040

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0027	.0071	36.19	.0001	1.921	.0091	.0050	.6632	3.977
Stddev	.0017	.0007	.09	.0003	.002	.0001	.0008	.0019	.007
%RSD	61.71	9.564	.2354	528.1	.0993	1.015	16.50	.2866	.1705
#1	.0033	.0077	36.10	-.0002	1.922	.0091	.0055	.6647	3.971
#2	.0008	.0073	36.19	.0003	1.919	.0092	.0054	.6639	3.976
#3	.0041	.0064	36.27	.0001	1.922	.0090	.0040	.6611	3.984

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2161.2	5973.9	43503.	3761.8
Stddev	5.1	12.9	266.	22.6
%RSD	.23571	.21573	.61179	.60069
#1	2160.9	5980.5	43280.	3754.1
#2	2166.5	5982.1	43433.	3787.3
#3	2156.3	5959.0	43798.	3744.1

Zoom In Zoom Out

Sample Name: DI CHECK Acquired: 5/18/2016 16:05:04 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0005	.0546	.0009	.0002	.0000	.1950	.0001	.0001	.0000	-.0006
Stddev	.0004	.0139	.0002	.0001	.0001	.0104	.0000	.0001	.000	.0003
%RSD	70.71	25.45	19.41	75.59	254.2	5.324	32.27	57.27	156.3	52.38
#1	-.0005	.0706	.0010	.0001	.0000	.2026	.0001	.0002	.0000	-.0007
#2	-.0001	.0453	.0007	.0001	.0001	.1993	.0001	.0001	-.0001	-.0002
#3	-.0009	.0479	.0011	.0003	.0000	.1832	.0000	.0002	.0000	-.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0195	.2143	.1239	.0012	.0002	.2306	.0000	-.0003	-.0011	-.0015
Stddev	.0063	.0138	.0173	.0002	.0001	.0072	.000	.0002	.0005	.0008
%RSD	32.07	6.462	13.94	20.71	45.25	3.137	130.8	87.15	43.22	51.37
#1	.0251	.2302	.1096	.0014	.0002	.2382	.0000	.0000	-.0008	-.0009
#2	.0207	.2071	.1189	.0011	.0001	.2297	.0000	-.0005	-.0017	-.0023
#3	.0128	.2055	.1431	.0009	.0002	.2239	.0000	-.0003	-.0009	-.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0095	-.0003	.0004	-.0001	.0015	.0002	.0001
Stddev	.0023	.0001	.0001	.0001	.0003	.0001	.0002
%RSD	24.23	44.37	26.80	106.5	22.77	55.93	196.6
#1	.0118	-.0003	.0005	-.0001	.0018	.0001	.0003
#2	.0093	-.0001	.0003	.0000	.0014	.0003	.0000
#3	.0073	-.0003	.0003	-.0001	.0012	.0002	.0000
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: DI CHECK Acquired: 5/18/2016 16:05:04 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2944.9	6868.6	52017.	3975.3
Stddev	15.0	50.2	145.	1.8
%RSD	.51069	.73044	.27926	.04593
#1	2951.4	6903.8	52086.	3977.4
#2	2955.6	6890.9	51850.	3974.6
#3	2927.7	6811.2	52114.	3973.9

Zoom In Zoom Out

Sample Name: MP30369-MB1 Acquired: 5/18/2016 16:09:15 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0005	.0045	-.0001	.0001	.0001	.0194	.0000	.0000	.0002	-.0001
Stddev	.0004	.0136	.0005	.0002	.0000	.0045	.0001	.0001	.0002	.0003
%RSD	77.55	305.0	628.6	428.2	10.73	23.28	248.5	189.2	84.18	268.8
#1	-.0003	-.0072	-.0006	-.0002	.0001	.0142	.0000	.0001	.0004	-.0002
#2	-.0009	.0194	.0000	.0002	.0001	.0222	.0000	.0000	.0000	-.0003
#3	-.0002	.0011	.0003	.0001	.0001	.0218	.0001	.0000	.0003	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0455	.1684	.0153	.0004	.0001	.1774	.0000	-.0011	.0004	.0006
Stddev	.0101	.0240	.0241	.0000	.0001	.0118	.0001	.0002	.0006	.0006
%RSD	22.24	14.27	157.2	6.903	129.6	6.675	705.8	15.79	137.8	100.5
#1	.0566	.1948	.0154	.0004	.0001	.1884	.0000	-.0009	.0011	.0000
#2	.0431	.1478	-.0088	.0004	.0001	.1649	.0000	-.0010	.0004	.0012
#3	.0368	.1625	.0394	.0004	.0000	.1790	-.0001	-.0013	-.0002	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0168	.0001	.0000	.0001	.0003	.0002	.0004
Stddev	.0006	.0002	.0000	.0001	.0003	.0001	.0001
%RSD	3.274	243.1	419.2	105.3	92.45	70.27	13.19
#1	.0174	-.0001	.0000	.0000	.0006	.0002	.0004
#2	.0167	.0002	.0000	.0002	.0004	.0003	.0005
#3	.0163	.0001	.0000	.0001	.0000	.0001	.0004
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP30369-MB1 Acquired: 5/18/2016 16:09:15 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2768.7	6513.6	50050.	3846.3
Stddev	7.8	15.2	241.	29.9
%RSD	.28016	.23409	.48168	.77687
#1	2766.3	6507.4	50189.	3843.2
#2	2777.4	6531.0	50190.	3818.1
#3	2762.5	6502.4	49772.	3877.6

Zoom In Zoom Out

Sample Name: MP30369-B1 Acquired: 5/18/2016 16:13:27 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0478	27.39	1.922	2.045	.0526	26.24	.0507	.5047	.2123	.2597
Stddev	.0005	.09	.002	.004	.0002	.09	.0001	.0008	.0008	.0005
%RSD	1.089	.3191	.1247	.1689	.4072	.3473	.2089	.1540	.3686	.1990
#1	.0478	27.49	1.920	2.048	.0528	26.35	.0506	.5038	.2120	.2599
#2	.0473	27.32	1.924	2.045	.0524	26.17	.0508	.5047	.2132	.2591
#3	.0484	27.35	1.923	2.042	.0525	26.22	.0507	.5054	.2117	.2601
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	26.11	24.97	25.35	.5250	.4745	25.15	.5042	.4949	.4893	1.949
Stddev	.02	.03	.07	.0008	.0011	.07	.0007	.0008	.0012	.005
%RSD	.0830	.1204	.2739	.1550	.2261	.2588	.1440	.1647	.2490	.2601
#1	26.13	24.98	25.35	.5255	.4733	25.22	.5037	.4949	.4880	1.946
#2	26.09	24.99	25.42	.5255	.4748	25.09	.5039	.4942	.4903	1.955
#3	26.09	24.94	25.29	.5241	.4754	25.13	.5051	.4958	.4897	1.947
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0207	.4848	.4908	.4981	2.011	.4778	.5053
Stddev	.0005	.0002	.0008	.0013	.006	.0009	.0008
%RSD	2.618	.0372	.1706	.2529	.2924	.1815	.1564
#1	.0205	.4846	.4917	.4992	2.007	.4775	.5045
#2	.0203	.4849	.4901	.4985	2.008	.4787	.5061
#3	.0213	.4849	.4906	.4967	2.018	.4771	.5054
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP30369-B1 Acquired: 5/18/2016 16:13:27 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2531.9	6412.6	48193.	3808.1
Stddev	3.9	13.5	7.	7.2
%RSD	.15497	.21066	.01371	.18804
#1	2536.4	6427.1	48192.	3799.8
#2	2530.0	6400.4	48201.	3812.2
#3	2529.2	6410.4	48188.	3812.3

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/18/2016 16:17:24 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2510	41.47	1.959	1.976	2.035	41.87	2.037	2.024	2.105	2.047
Stddev	.0009	.05	.007	.003	.004	.04	.005	.005	.001	.003
%RSD	.3490	.1281	.3621	.1602	.2062	.1017	.2481	.2626	.0589	.1481
#1	.2508	41.47	1.956	1.980	2.039	41.84	2.034	2.022	2.107	2.046
#2	.2503	41.52	1.954	1.973	2.034	41.92	2.034	2.020	2.104	2.045
#3	.2520	41.41	1.967	1.976	2.031	41.86	2.043	2.030	2.105	2.050
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.88	40.28	40.92	2.069	2.005	40.81	1.997	2.025	1.971	1.963
Stddev	.09	.06	.04	.001	.011	.10	.004	.005	.007	.007
%RSD	.2180	.1371	.1017	.0405	.5487	.2553	.2052	.2312	.3789	.3397
#1	41.78	40.30	40.87	2.069	1.997	40.93	1.996	2.029	1.967	1.963
#2	41.95	40.32	40.95	2.068	2.002	40.72	1.993	2.019	1.966	1.957
#3	41.92	40.22	40.93	2.070	2.018	40.78	2.001	2.026	1.980	1.971
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.043	1.984	2.058	2.083	2.042	2.039	2.033
Stddev	.007	.005	.004	.002	.002	.002	.004
%RSD	.3479	.2474	.1932	.0792	.0846	.1131	.2224
#1	2.039	1.982	2.062	2.082	2.043	2.037	2.032
#2	2.039	1.981	2.054	2.084	2.040	2.041	2.030
#3	2.051	1.990	2.058	2.085	2.043	2.038	2.039
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/18/2016 16:17:24 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2367.5	6177.9	46739.	3770.0
Stddev	3.5	11.8	124.	11.5
%RSD	.14857	.19165	.26532	.30471
#1	2364.0	6182.8	46796.	3782.4
#2	2371.0	6186.5	46824.	3767.9
#3	2367.5	6164.4	46597.	3759.7

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/18/2016 16:21:20 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0005	.0032	.0016	.0005	.0005	.0147	.0002	.0002	.0004
Stddev	.0003	.0110	.0002	.0000	.0001	.0018	.0000	.0001	.0002
%RSD	51.03	346.2	13.24	8.920	22.61	12.07	24.26	33.74	55.36
#1	-.0003	-.0071	.0016	.0006	.0005	.0155	.0002	.0002	.0006
#2	-.0008	.0018	.0019	.0005	.0006	.0159	.0002	.0002	.0004
#3	-.0005	.0149	.0015	.0005	.0004	.0126	.0001	.0001	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0390	.0450	.0120	.0003	F.0027	.0469	.0001	-.0004
Stddev	.0002	.0041	.0178	.0311	.0001	.0006	.0114	.0001	.0005
%RSD	229.0	10.63	39.45	258.4	20.24	21.98	24.21	122.4	120.8
#1	.0000	.0435	.0631	-.0065	.0004	.0033	.0581	.0002	-.0008
#2	.0001	.0382	.0444	-.0053	.0002	.0027	.0473	.0000	.0001
#3	-.0003	.0353	.0276	.0480	.0003	.0021	.0354	.0000	-.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0017	.0001	.0023	.0005	.0004	F.0021	.0007	.0006	.0001
Stddev	.0007	.0003	.0001	.0003	.0002	.0002	.0012	.0005	.0000
%RSD	42.35	239.3	3.604	60.37	40.53	8.909	165.9	78.02	34.16
#1	.0019	.0002	.0022	.0005	.0003	.0024	.0017	.0007	.0001
#2	.0023	-.0002	.0024	.0008	.0006	.0020	-.0006	.0010	.0001
#3	.0009	.0004	.0022	.0002	.0003	.0020	.0010	.0001	.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0020			
Low Limit						-.0020			

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/18/2016 16:21:20 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2744.1	6457.6	48819.	3715.2
Stddev	1.9	9.0	188.	43.6
%RSD	.06861	.13871	.38587	1.1735
#1	2746.2	6462.5	48686.	3698.0
#2	2742.7	6463.0	49034.	3682.8
#3	2743.3	6447.2	48736.	3764.7

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: FA33902-2L Acquired: 5/18/2016 16:25:31 Type: Unk
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0010	.0058	.0003	.0034	.0003	231.6	-.0001	.0001	.0105	-.0005
Stddev	.0005	.0056	.0005	.0001	.0001	1.6	.0001	.0000	.0001	.0003
%RSD	47.48	96.73	151.1	4.218	36.40	.6955	61.14	41.49	1.049	63.65
#1	-.0008	-.0006	.0003	.0035	.0003	231.1	-.0001	.0001	.0106	-.0009
#2	-.0015	.0100	.0008	.0034	.0002	233.4	-.0001	.0002	.0106	-.0003
#3	-.0006	.0080	-.0002	.0032	.0003	230.3	-.0002	.0001	.0104	-.0004

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	.0114	.0885	.2565	.0001	.0005	.7071	-.0001	.0007	.0012	.0016
Stddev	.0033	.0195	.0337	.0000	.0001	.0042	.0001	.0009	.0009	.0006
%RSD	29.01	22.01	13.15	58.95	23.63	.5941	104.7	131.9	71.70	37.27
#1	.0151	.0719	.2762	.0001	.0007	.7058	-.0001	.0016	.0013	.0021
#2	.0088	.1100	.2757	.0001	.0004	.7036	-.0001	.0001	.0020	.0017
#3	.0102	.0838	.2175	.0000	.0005	.7118	.0000	.0003	.0003	.0010

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	4.867	-.0002	.0443	.0013	.0000	.0063	-.0006
Stddev	.001	.0001	.0001	.0002	.0009	.0001	.0000
%RSD	.0196	50.01	.2669	12.35	2319.	.8331	1.184
#1	4.868	-.0003	.0443	.0013	.0002	.0063	-.0006
#2	4.867	-.0001	.0442	.0014	.0009	.0062	-.0006
#3	4.867	-.0003	.0445	.0011	-.0010	.0063	-.0006

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2488.1	6204.5	46472.	3756.8
Stddev	4.5	13.1	100.	34.0
%RSD	.18282	.21180	.21596	.90548
#1	2486.4	6211.9	46433.	3757.4
#2	2493.3	6212.3	46396.	3722.5
#3	2484.7	6189.4	46586.	3790.5

Zoom In Zoom Out

Sample Name: MP30369-D1 Acquired: 5/18/2016 16:29:48 Type: Unk
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0007	.0173	-.0007	.0034	.0001	232.6	-.0001	.0002	.0102	-.0006
Stddev	.0003	.0136	.0002	.0001	.0000	.6	.0000	.0001	.0001	.0003
%RSD	42.27	78.68	25.49	3.040	30.92	.2565	38.14	85.18	1.143	45.01
#1	-.0009	.0016	-.0007	.0033	.0001	232.7	-.0001	.0002	.0102	-.0003
#2	-.0004	.0255	-.0005	.0033	.0001	233.1	-.0001	.0000	.0103	-.0009
#3	-.0008	.0249	-.0009	.0035	.0002	231.9	-.0002	.0003	.0101	-.0006

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	.0042	.0985	.2506	.0000	.0003	.7174	-.0004	.0001	.0014	.0002
Stddev	.0029	.0037	.0276	.0000	.0002	.0041	.0001	.0003	.0003	.0008
%RSD	69.14	3.765	11.03	72.94	50.54	.5647	33.13	232.3	23.40	445.0
#1	.0076	.0971	.2820	.0000	.0004	.7216	-.0005	-.0001	.0018	.0009
#2	.0026	.1027	.2300	.0000	.0005	.7170	-.0004	.0000	.0011	.0004
#3	.0025	.0956	.2397	.0001	.0001	.7135	-.0002	.0005	.0014	-.0007

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	4.916	.0001	.0444	.0010	.0006	.0064	-.0006
Stddev	.003	.0002	.0003	.0001	.0004	.0003	.0000
%RSD	.0506	319.6	.7444	5.472	66.58	4.069	6.606
#1	4.913	-.0001	.0441	.0009	.0004	.0067	-.0005
#2	4.917	.0000	.0447	.0010	.0003	.0062	-.0006
#3	4.917	.0003	.0443	.0010	.0010	.0064	-.0006

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2493.5	6203.2	46561.	3756.8
Stddev	6.9	6.3	157.	12.2
%RSD	.27622	.10084	.33734	.32569
#1	2488.8	6197.1	46672.	3767.1
#2	2501.4	6209.6	46630.	3743.3
#3	2490.4	6203.0	46381.	3760.1

Zoom In Zoom Out

Sample Name: MP30369-SD1 Acquired: 5/18/2016 16:34:06 Type: Unk
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0019	.0246	.0027	.0042	.0006	250.7	-.0001	.0008	.0118	-.0004
Stddev	.0018	.0191	.0015	.0010	.0001	1.0	.0001	.0002	.0010	.0015
%RSD	93.17	77.50	57.76	23.60	16.69	.4016	74.41	23.29	8.396	332.6
#1	-.0021	.0083	.0009	.0035	.0006	251.6	.0000	.0006	.0110	.0008
#2	-.0036	.0456	.0036	.0053	.0005	249.6	-.0002	.0009	.0129	-.0020
#3	.0000	.0199	.0035	.0037	.0007	250.8	-.0001	.0008	.0115	-.0001

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	.0147	.2070	.4428	.0000	-.0005	.8073	-.0013	-.0010	.0028	-.0010
Stddev	.0101	.1444	.1010	.0001	.0009	.0048	.0005	.0007	.0065	.0028
%RSD	68.72	69.74	22.81	305.9	175.3	.5987	35.13	70.03	230.8	299.2
#1	.0218	.2675	.5593	.0001	.0004	.8017	-.0011	-.0005	.0087	-.0033
#2	.0031	.0423	.3812	.0000	-.0005	.8107	-.0010	-.0007	.0039	-.0018
#3	.0193	.3114	.3878	-.0001	-.0015	.8094	-.0018	-.0018	-.0041	.0022

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	5.193	-.0001	.0470	.0059	.0080	.0067	.0493
Stddev	.015	.0003	.0004	.0003	.0038	.0009	.0005
%RSD	.2918	399.5	.9129	5.815	47.59	12.73	1.078
#1	5.176	-.0004	.0474	.0060	.0080	.0077	.0496
#2	5.200	.0001	.0466	.0061	.0117	.0065	.0497
#3	5.204	.0001	.0471	.0055	.0041	.0060	.0487

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2649.8	6386.7	48424.	3759.4
Stddev	2.7	5.8	85.	20.9
%RSD	.10090	.09081	.17557	.55643
#1	2646.7	6380.0	48337.	3747.1
#2	2651.6	6390.5	48430.	3783.6
#3	2651.1	6389.6	48506.	3747.5

Zoom In Zoom Out

Sample Name: MP30369-S1 Acquired: 5/18/2016 16:38:14 Type: Unk
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0492	28.12	1.975	2.073	.0537	255.4	.0502	.5002	.2251	.2651
Stddev	.0004	.09	.004	.007	.0002	6.3	.0001	.0003	.0006	.0006
%RSD	.8540	.3103	.1905	.3430	.3974	2.465	.1439	.0609	.2600	.2275
#1	.0489	28.04	1.970	2.066	.0539	254.2	.0502	.5001	.2257	.2656
#2	.0491	28.21	1.977	2.080	.0537	262.2	.0501	.4999	.2250	.2653
#3	.0497	28.10	1.977	2.073	.0535	249.8	.0503	.5005	.2246	.2644

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	26.30	26.00	25.30	.5285	.4783	27.09	.4978	.5029	.5016	2.016
Stddev	.14	.09	.27	.0007	.0006	.09	.0001	.0009	.0012	.003
%RSD	.5340	.3327	1.069	.1390	.1338	.3156	.0152	.1766	.2321	.1262
#1	26.19	25.91	25.06	.5294	.4776	27.01	.4978	.5033	.5010	2.014
#2	26.46	26.09	25.59	.5281	.4786	27.18	.4977	.5036	.5009	2.015
#3	26.25	26.00	25.26	.5281	.4788	27.07	.4978	.5019	.5029	2.019

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	4.956	.4789	.5412	.5102	2.022	.4931	.4996
Stddev	.009	.0003	.0012	.0008	.002	.0001	.0008
%RSD	.1809	.0677	.2213	.1663	.0886	.0301	.1656
#1	4.946	.4788	.5405	.5106	2.024	.4932	.4993
#2	4.957	.4786	.5426	.5108	2.021	.4931	.4989
#3	4.964	.4792	.5404	.5092	2.022	.4929	.5005

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2367.6	6197.4	46095.	3752.7
Stddev	5.2	11.7	139.	46.4
%RSD	.22040	.18805	.30167	1.2377
#1	2363.5	6200.2	45939.	3786.3
#2	2373.4	6207.4	46141.	3699.7
#3	2365.8	6184.6	46206.	3772.1

Zoom In Zoom Out

Sample Name: MP30369-S2 Acquired: 5/18/2016 16:42:20 Type: Unk
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0478	27.45	1.917	2.026	.0524	245.7	.0488	.4870	.2191	.2576
Stddev	.0006	.13	.004	.006	.0002	2.6	.0001	.0004	.0007	.0006
%RSD	1.231	.4656	.2304	.3020	.4624	1.044	.1933	.0882	.3354	.2519
#1	.0483	27.36	1.921	2.030	.0525	243.5	.0489	.4873	.2188	.2583
#2	.0471	27.60	1.918	2.029	.0526	248.5	.0489	.4871	.2200	.2573
#3	.0479	27.39	1.913	2.019	.0521	245.1	.0487	.4865	.2186	.2571

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	25.73	25.40	24.68	.5157	.4686	26.46	.4835	.4920	.4858	1.953
Stddev	.13	.07	.10	.0001	.0006	.03	.0008	.0016	.0034	.004
%RSD	.5188	.2651	.4004	.0232	.1384	.0945	.1627	.3189	.6933	.2300
#1	25.78	25.33	24.57	.5158	.4689	26.43	.4844	.4906	.4894	1.953
#2	25.83	25.42	24.74	.5157	.4689	26.48	.4830	.4917	.4852	1.957
#3	25.58	25.46	24.74	.5155	.4678	26.46	.4831	.4937	.4827	1.948

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	4.803	.4662	.5312	.4999	1.973	.4790	.4868
Stddev	.006	.0008	.0013	.0005	.002	.0014	.0005
%RSD	.1257	.1632	.2466	.0999	.0910	.2840	.1014
#1	4.810	.4669	.5313	.5003	1.971	.4804	.4873
#2	4.802	.4654	.5325	.4994	1.974	.4777	.4869
#3	4.798	.4661	.5299	.5000	1.974	.4788	.4863

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2384.1	6248.5	46424.	3785.0
Stddev	3.4	5.6	258.	28.6
%RSD	.14082	.08939	.55502	.75611
#1	2387.6	6242.8	46448.	3817.8
#2	2383.6	6248.7	46155.	3764.7
#3	2381.0	6253.9	46668.	3772.6

Zoom In Zoom Out

Sample Name: FA33835-1L Acquired: 5/18/2016 16:46:26 Type: Unk
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0007	.0382	.0004	.0070	.0001	69.54	.0000	.0002	.0005
Stddev	.0004	.0154	.0004	.0001	.0000	.44	.0000	.0001	.0002
%RSD	57.89	40.33	103.4	1.967	36.12	.6330	42.13	39.02	45.42
#1	-.0007	.0495	.0004	.0070	.0001	69.96	.0000	.0003	.0002
#2	-.0002	.0207	.0000	.0069	.0001	69.58	.0000	.0001	.0007
#3	-.0010	.0444	.0008	.0072	.0001	69.08	.0001	.0002	.0005

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0001	.0324	.2939	4.311	.0077	.0002	F166.5	.0002	-.0010
Stddev	.0003	.0017	.0413	.026	.0000	.0002	3.6	.0002	.0005
%RSD	634.1	5.261	14.06	.6077	.3869	82.28	2.163	83.20	47.72
#1	.0000	.0344	.2680	4.336	.0077	.0004	170.6	.0004	-.0015
#2	.0002	.0314	.2720	4.314	.0077	.0001	165.2	.0000	-.0009
#3	-.0004	.0316	.3415	4.284	.0077	.0001	163.8	.0002	-.0006

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0007	.0026	.0553	.0000	.1373	.0025	.0008	.0023	.0031
Stddev	.0007	.0015	.0080	.0002	.0002	.0000	.0007	.0002	.0000
%RSD	108.3	57.31	14.47	322.5	.1763	.7098	91.35	10.44	1.194
#1	.0012	.0028	.0644	.0001	.1375	.0025	.0015	.0023	.0031
#2	-.0002	.0010	.0523	-.0001	.1371	.0025	.0008	.0020	.0031
#3	.0010	.0040	.0492	.0002	.1371	.0024	.0001	.0025	.0031

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2413.6	6179.0	45621.	3747.3
Stddev	4.0	12.7	289.	54.2
%RSD	.16447	.20525	.63300	1.4473
#1	2409.3	6182.5	45902.	3701.9
#2	2417.1	6189.6	45325.	3732.6
#3	2414.4	6164.9	45634.	3807.3

Zoom In Zoom Out

Sample Name: FA33843-1 Acquired: 5/18/2016 16:50:44 Type: Unk
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0006	.0358	.0021	.1198	.0001	3.368	.0007	.0016	.0094
Stddev	.0003	.0119	.0002	.0007	.0001	.008	.0000	.0001	.0001
%RSD	44.54	33.41	8.585	.6185	115.4	.2373	5.603	6.683	1.140
#1	-.0007	.0481	.0021	.1199	.0000	3.366	.0007	.0017	.0095
#2	-.0003	.0242	.0019	.1205	.0001	3.376	.0007	.0015	.0093
#3	-.0008	.0349	.0022	.1190	.0002	3.360	.0008	.0017	.0094

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0011	2.543	.3675	.1266	.2212	.0002	F162.8	.0195	.0200
Stddev	.0006	.024	.0314	.0061	.0002	.0001	.9	.0002	.0006
%RSD	53.97	.9569	8.552	4.853	.0710	35.96	.5330	.9260	2.918
#1	.0006	2.538	.3600	.1226	.2213	.0002	162.9	.0193	.0200
#2	.0009	2.569	.4019	.1337	.2210	.0002	163.6	.0195	.0205
#3	.0017	2.521	.3404	.1235	.2213	.0001	161.9	.0197	.0193

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0008	.0015	.0593	.0001	.0403	.0005	-.0001	.0003	.1444
Stddev	.0005	.0004	.0011	.0001	.0003	.0000	.0002	.0004	.0001
%RSD	61.93	28.75	1.821	227.9	.7316	7.347	151.2	109.7	.1009
#1	.0008	.0014	.0580	.0002	.0404	.0005	-.0001	.0004	.1445
#2	.0003	.0019	.0596	.0001	.0406	.0005	.0001	.0007	.1443
#3	.0013	.0011	.0601	-.0001	.0400	.0005	-.0003	-.0001	.1445

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2462.2	6224.5	45714.	3716.8
Stddev	7.2	14.0	92.	36.9
%RSD	.29205	.22543	.20216	.99207
#1	2454.2	6210.0	45609.	3751.3
#2	2468.2	6238.1	45782.	3677.9
#3	2464.1	6225.3	45750.	3721.1

Zoom In Zoom Out

Sample Name: FA33843-2 Acquired: 5/18/2016 16:55:00 Type: Unk
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0004	.0906	.0015	.2091	.0001	7.381	.0013	.0027	.0522
Stddev	.0004	.0185	.0005	.0004	.0001	.006	.0000	.0002	.0008
%RSD	86.45	20.44	34.93	.1959	78.40	.0847	1.653	6.175	1.443
#1	.0000	.0753	.0009	.2088	.0000	7.378	.0013	.0025	.0522
#2	-.0008	.1112	.0016	.2091	.0002	7.388	.0012	.0027	.0529
#3	-.0005	.0852	.0019	.2096	.0002	7.377	.0013	.0028	.0514

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0007	2.284	.7611	.3297	.3390	.0003	F159.4	.0222	.0583
Stddev	.0002	.002	.0041	.0088	.0010	.0001	3.0	.0000	.0003
%RSD	22.39	.0963	.5351	2.656	.2874	31.52	1.905	.0973	.4656
#1	.0008	2.284	.7608	.3283	.3399	.0004	162.9	.0222	.0579
#2	.0005	2.287	.7654	.3218	.3393	.0002	157.4	.0223	.0584
#3	.0007	2.282	.7572	.3391	.3380	.0003	157.9	.0222	.0584

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0005	.0027	.1594	.0001	.1644	.0009	.0006	.0003	.3637
Stddev	.0007	.0007	.0017	.0000	.0003	.0000	.0003	.0001	.0003
%RSD	141.6	27.15	1.041	36.22	.2004	2.340	46.36	33.76	.0722
#1	-.0005	.0019	.1595	.0001	.1640	.0009	.0003	.0002	.3634
#2	-.0013	.0030	.1576	.0002	.1646	.0009	.0006	.0004	.3639
#3	.0002	.0032	.1610	.0002	.1646	.0009	.0009	.0004	.3637

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2485.4	6281.7	46490.	3799.4
Stddev	3.9	4.2	339.	26.8
%RSD	.15605	.06712	.72925	.70499
#1	2489.7	6285.6	46259.	3772.9
#2	2484.3	6277.2	46333.	3798.9
#3	2482.2	6282.3	46879.	3826.4

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: MP30369-MB2 Acquired: 5/18/2016 16:59:15 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0008	-.0049	.0003	.0002	.0000	.0137	.0000	.0001	-.0001	-.0005
Stddev	.0003	.0069	.0007	.0001	.0001	.0002	.0000	.0002	.0002	.0001
%RSD	34.74	141.4	222.9	87.70	110.2	1.166	102.8	299.0	165.4	14.57
#1	-.0011	.0021	.0011	.0002	.0000	.0138	.0000	-.0001	-.0003	-.0005
#2	-.0006	-.0117	-.0004	.0000	.0001	.0135	.0001	.0002	-.0002	-.0005
#3	-.0007	-.0051	.0003	.0002	.0001	.0137	.0000	.0001	.0001	-.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0034	.0702	-.0030	.0000	.0001	.1249	.0000	.0000	-.0004	.0006
Stddev	.0028	.0345	.0098	.0000	.0001	.0039	.000	.0003	.0002	.0009
%RSD	83.22	49.18	323.4	180.1	113.2	3.084	416.4	700.2	45.82	139.5
#1	.0022	.0873	.0024	.0000	.0001	.1217	-.0002	-.0003	-.0007	.0009
#2	.0067	.0305	.0029	.0001	.0000	.1291	.0001	.0002	-.0003	.0014
#3	.0014	.0928	-.0143	.0000	.0001	.1238	-.0001	.0002	-.0003	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0106	.0003	.0000	.0001	.0001	.0002	.0002
Stddev	.0003	.0002	.0000	.0001	.0010	.0002	.0000
%RSD	3.001	59.30	144.1	54.60	834.2	98.11	23.56
#1	.0104	.0002	.0000	.0001	.0007	.0000	.0002
#2	.0103	.0005	.0001	.0001	.0007	.0002	.0001
#3	.0109	.0002	.0000	.0002	-.0010	.0005	.0002
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP30369-MB2 Acquired: 5/18/2016 16:59:15 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2794.3	6590.9	50496.	3878.5
Stddev	2.4	9.9	61.	36.3
%RSD	.08717	.14959	.11997	.93561
#1	2794.7	6583.6	50565.	3908.0
#2	2791.7	6586.9	50473.	3838.0
#3	2796.5	6602.1	50451.	3889.6

Zoom In Zoom Out

Sample Name: MP30369-B2 Acquired: 5/18/2016 17:03:26 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0478	27.71	1.932	2.062	.0532	26.52	.0508	.5068	.2139	.2612
Stddev	.0003	.06	.003	.010	.0003	.05	.0001	.0005	.0008	.0005
%RSD	.7124	.2200	.1299	.4942	.4890	.1745	.2015	.0916	.3568	.1924
#1	.0476	27.65	1.929	2.051	.0531	26.50	.0508	.5069	.2137	.2617
#2	.0482	27.73	1.934	2.064	.0530	26.49	.0507	.5063	.2148	.2607
#3	.0477	27.76	1.932	2.072	.0535	26.58	.0509	.5072	.2134	.2613
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	26.51	25.30	25.57	.5277	.4795	25.57	.5062	.4963	.4901	1.975
Stddev	.13	.11	.10	.0020	.0010	.06	.0005	.0000	.0014	.004
%RSD	.4777	.4391	.3991	.3868	.2008	.2470	.1068	.0043	.2882	.1994
#1	26.36	25.19	25.46	.5259	.4789	25.54	.5056	.4963	.4900	1.971
#2	26.61	25.31	25.59	.5299	.4790	25.53	.5062	.4963	.4888	1.976
#3	26.54	25.41	25.67	.5272	.4806	25.64	.5067	.4963	.4916	1.979
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0170	.4876	.4957	.5033	2.012	.4805	.5072
Stddev	.0005	.0002	.0021	.0019	.001	.0009	.0007
%RSD	2.765	.0495	.4309	.3825	.0321	.1863	.1344
#1	.0166	.4873	.4937	.5024	2.012	.4798	.5070
#2	.0167	.4877	.4954	.5056	2.012	.4815	.5067
#3	.0175	.4877	.4979	.5020	2.011	.4803	.5080
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP30369-B2 Acquired: 5/18/2016 17:03:26 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2518.9	6370.4	47844.	3780.2
Stddev	3.9	9.0	258.	5.4
%RSD	.15419	.14057	.53968	.14168
#1	2515.0	6362.2	48103.	3786.3
#2	2519.0	6379.9	47586.	3777.5
#3	2522.7	6369.0	47842.	3776.7

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/18/2016 17:07:24 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2494	41.09	1.951	1.976	2.024	41.57	2.018	2.008	2.081	2.027
Stddev	.0011	.24	.005	.011	.011	.20	.005	.005	.006	.004
%RSD	.4424	.5778	.2653	.5424	.5331	.4886	.2401	.2645	.2829	.2045
#1	.2482	40.96	1.947	1.968	2.013	41.41	2.015	2.005	2.077	2.025
#2	.2502	40.94	1.949	1.972	2.025	41.50	2.016	2.005	2.087	2.032
#3	.2499	41.36	1.957	1.988	2.034	41.80	2.024	2.014	2.078	2.024
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.75	40.29	40.83	2.053	1.993	40.76	1.984	2.004	1.962	1.958
Stddev	.16	.20	.16	.006	.009	.19	.005	.006	.007	.006
%RSD	.3859	.4950	.3821	.3128	.4523	.4691	.2446	.3233	.3636	.2920
#1	41.61	40.23	40.69	2.046	1.985	40.64	1.982	1.997	1.958	1.956
#2	41.72	40.14	40.79	2.059	1.990	40.66	1.981	2.005	1.958	1.953
#3	41.92	40.52	41.00	2.055	2.003	40.98	1.990	2.010	1.971	1.964
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.030	1.975	2.049	2.067	2.023	2.025	2.015
Stddev	.005	.004	.010	.007	.008	.005	.004
%RSD	.2732	.2262	.4968	.3545	.3857	.2396	.1772
#1	2.031	1.971	2.041	2.059	2.018	2.024	2.011
#2	2.024	1.974	2.046	2.073	2.019	2.030	2.015
#3	2.035	1.980	2.060	2.070	2.032	2.020	2.018
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/18/2016 17:07:24 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2397.5	6247.7	47242.	3786.4
Stddev	6.8	13.0	233.	17.9
%RSD	.28511	.20741	.49335	.47254
#1	2405.1	6261.7	47426.	3768.8
#2	2395.6	6245.3	46980.	3804.6
#3	2391.9	6236.2	47320.	3785.9

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/18/2016 17:11:19 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0004	.0087	.0015	.0006	.0005	.0102	.0002	.0003	.0002
Stddev	.0001	.0102	.0001	.0003	.0001	.0031	.0000	.0001	.0001
%RSD	26.22	116.6	8.684	47.08	30.78	30.66	25.48	38.90	60.78
#1	-.0004	.0017	.0015	.0008	.0006	.0112	.0002	.0003	.0002
#2	-.0003	.0204	.0014	.0006	.0004	.0128	.0002	.0004	.0004
#3	-.0004	.0041	.0017	.0003	.0004	.0067	.0001	.0002	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0374	.0377	.0247	.0003	F.0026	.0267	.0001	.0001
Stddev	.0002	.0067	.0162	.0195	.0000	.0005	.0066	.0001	.0003
%RSD	225.8	17.84	43.12	78.97	16.72	20.01	24.72	77.77	218.6
#1	.0003	.0443	.0190	.0298	.0004	.0032	.0193	.0002	.0004
#2	.0001	.0368	.0457	.0032	.0003	.0025	.0321	.0001	-.0002
#3	-.0001	.0310	.0483	.0412	.0003	.0022	.0288	.0000	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F.0027	.0012	.0011	.0003	.0004	F.0023	F.0021	.0006	.0001
Stddev	.0013	.0012	.0006	.0000	.0000	.0002	.0006	.0002	.0001
%RSD	48.92	103.7	53.48	14.63	3.888	7.625	29.10	34.07	108.6
#1	.0039	.0014	.0017	.0003	.0004	.0025	.0022	.0004	.0003
#2	.0029	.0023	.0012	.0004	.0004	.0022	.0026	.0007	.0001
#3	.0013	-.0001	.0005	.0003	.0004	.0022	.0014	.0006	.0000
Check ?	Chk Fail	Chk Pass	None	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass
High Limit	.0020					.0020	.0020		
Low Limit	-.0020					-.0020	-.0020		

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/18/2016 17:11:19 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2738.9	6417.6	49251.	3781.7
Stddev	4.1	12.1	158.	21.6
%RSD	.14935	.18787	.32180	.57084
#1	2740.4	6431.4	49393.	3806.1
#2	2741.9	6409.6	49080.	3774.1
#3	2734.2	6411.8	49280.	3765.1

Zoom In Zoom Out

Sample Name: MP30369-MB3 Acquired: 5/18/2016 17:15:30 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	-.0026	-.0001	.0003	.0001	.0118	.0000	.0000	.0005
Stddev	.0004	.0031	.0002	.0001	.0001	.0038	.0000	.0002	.0001
%RSD	132.1	119.1	485.5	24.54	51.34	32.51	107.6	2051.	15.96
#1	-.0005	-.0047	.0000	.0003	.0000	.0157	.0000	.0001	.0005
#2	.0002	.0010	.0002	.0003	.0001	.0119	.0000	-.0002	.0005
#3	-.0005	-.0041	-.0003	.0002	.0001	.0080	.0001	.0001	.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0117	.1334	.0018	.0001	.0006	F153.3	.0000	-.0001
Stddev	.0001	.0033	.0151	.0253	.0000	.0001	.9	.0001	.0003
%RSD	1002.	27.90	11.35	1423.	47.64	14.12	.6099	1126.	279.9
#1	.0000	.0079	.1227	-.0240	.0001	.0007	152.2	-.0001	-.0001
#2	-.0001	.0132	.1508	.0027	.0001	.0005	153.6	.0000	.0002
#3	.0001	.0139	.1269	.0266	.0000	.0006	154.0	.0000	-.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							2.500		
Low Limit							-2.500		

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0007	.0012	.0111	.0003	.0000	.0008	-.0003	.0003	.0003
Stddev	.0004	.0006	.0003	.0001	.0000	.0001	.0007	.0002	.0000
%RSD	64.84	51.72	2.939	35.34	837.1	13.64	264.1	56.58	10.16
#1	.0004	.0015	.0110	.0004	.0000	.0009	.0004	.0002	.0003
#2	.0011	.0005	.0114	.0002	.0000	.0008	-.0001	.0004	.0004
#3	.0004	.0017	.0108	.0003	.0000	.0007	-.0011	.0001	.0003
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: MP30369-MB3 Acquired: 5/18/2016 17:15:30 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2468.7	6181.1	46410.	3800.8
Stddev	6.4	11.9	227.	31.7
%RSD	.26007	.19304	.48924	.83291
#1	2461.7	6167.3	46594.	3836.8
#2	2474.3	6188.1	46479.	3777.2
#3	2470.2	6187.9	46156.	3788.5

Zoom In Zoom Out

Sample Name: MP30369-B3 Acquired: 5/18/2016 17:19:50 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0487	27.09	1.989	2.056	.0525	25.92	.0506	.5001	.2099
Stddev	.0004	.03	.006	.003	.0003	.06	.0002	.0021	.0004
%RSD	.8268	.0965	.2840	.1544	.5432	.2135	.3964	.4104	.1885
#1	.0487	27.11	1.995	2.053	.0527	25.98	.0509	.5024	.2102
#2	.0491	27.09	1.987	2.059	.0525	25.89	.0505	.4985	.2100
#3	.0483	27.06	1.984	2.057	.0522	25.88	.0506	.4995	.2094
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2569	26.11	25.34	25.31	.5219	.4778	F172.5	.5060	.4969
Stddev	.0000	.07	.02	.06	.0009	.0013	1.0	.0020	.0014
%RSD	.0188	.2772	.0864	.2396	.1778	.2646	.5651	.3966	.2916
#1	.2569	26.02	25.35	25.38	.5230	.4790	173.1	.5083	.4982
#2	.2570	26.15	25.36	25.27	.5213	.4765	173.1	.5043	.4953
#3	.2569	26.15	25.32	25.29	.5214	.4779	171.4	.5056	.4972
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value							25.00		
Range							20.00%		

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4968	2.033	.0161	.4917	.4881	.4966	1.971	.4828	.5124
Stddev	.0016	.008	.0002	.0025	.0003	.0004	.009	.0008	.0022
%RSD	.3164	.3794	1.018	.5165	.0590	.0903	.4300	.1586	.4251
#1	.4975	2.042	.0159	.4945	.4879	.4971	1.980	.4831	.5148
#2	.4950	2.028	.0162	.4895	.4884	.4964	1.963	.4833	.5106
#3	.4978	2.029	.0161	.4912	.4881	.4963	1.972	.4819	.5118
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: MP30369-B3 Acquired: 5/18/2016 17:19:50 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2391.3	6161.4	46395.	3799.8
Stddev	9.3	23.8	155.	12.7
%RSD	.38955	.38666	.33394	.33321
#1	2381.7	6134.6	46218.	3796.7
#2	2400.3	6180.1	46461.	3813.8
#3	2391.9	6169.6	46506.	3789.0

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/18/2016 17:23:56 Type: Unk
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0082	.2254	.0106	.2163	.0055	1.113	.0053	.0534	.0107	.0263
Stddev	.0002	.0253	.0002	.0139	.0002	.073	.0000	.0002	.0002	.0004
%RSD	2.163	11.24	1.428	6.432	2.767	6.589	.7644	.2839	1.780	1.491
#1	.0081	.2545	.0108	.2324	.0056	1.197	.0053	.0533	.0106	.0261
#2	.0081	.2081	.0105	.2087	.0054	1.065	.0053	.0533	.0109	.0261
#3	.0084	.2136	.0106	.2079	.0053	1.076	.0054	.0536	.0107	.0268

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.3468	10.61	5.545	.0163	.0490	10.69	.0427	.0040	.0056	.0104
Stddev	.0292	.64	.383	.0001	.0000	.68	.0002	.0004	.0008	.0016
%RSD	8.416	6.034	6.905	.3353	.1008	6.365	.4679	8.968	15.11	15.48
#1	.3804	11.35	5.985	.0164	.0491	11.47	.0427	.0036	.0046	.0107
#2	.3327	10.23	5.296	.0163	.0491	10.30	.0430	.0041	.0062	.0118
#3	.3274	10.26	5.352	.0164	.0490	10.28	.0426	.0043	.0058	.0086

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0518	.0521	.0106	.0106	.0118	.0488	.0216
Stddev	.0005	.0004	.0008	.0001	.0005	.0001	.0001
%RSD	1.037	.7200	7.216	1.110	4.347	.2017	.3652
#1	.0517	.0521	.0115	.0107	.0116	.0488	.0216
#2	.0513	.0525	.0103	.0105	.0124	.0487	.0216
#3	.0523	.0518	.0101	.0107	.0114	.0489	.0215

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2669.3	6423.6	49133.	3707.0
Stddev	10.5	15.9	148.	204.0
%RSD	.39499	.24818	.30055	5.5031
#1	2657.8	6407.6	49183.	3471.6
#2	2671.7	6423.7	49249.	3817.3
#3	2678.5	6439.4	48966.	3832.0

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/18/2016 17:27:59 Type: Unk
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	-.0006	F510.2	.0022	.0008	.0002	485.0	-.0003	-.0001
Stddev	.0005	2.5	.0023	.0000	.0001	1.4	.0001	.0001
%RSD	78.48	.4879	104.1	5.843	26.81	.2854	24.52	131.0
#1	-.0010	512.9	.0027	.0008	.0002	486.6	-.0003	.0000
#2	-.0007	508.1	.0043	.0007	.0002	484.2	-.0004	-.0001
#3	-.0001	509.5	-.0003	.0008	.0003	484.2	-.0002	-.0002

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	.0010	-.0006	183.1	.2408	F514.1	.0004	.0007	.3565
Stddev	.0003	.0005	1.1	.0056	1.4	.0001	.0003	.0137
%RSD	30.13	72.20	.5883	2.306	.2664	22.50	39.18	3.843
#1	.0014	-.0005	183.3	.2455	513.8	.0005	.0011	.3598
#2	.0008	-.0003	184.0	.2424	515.6	.0003	.0007	.3682
#3	.0010	-.0012	181.9	.2347	513.0	.0003	.0005	.3415

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.0004	F-.0059	.0023	-.0012	.0156	.0004	.0004	.0003
Stddev	.0001	.0015	.0004	.0028	.0007	.0002	.0001	.0001
%RSD	28.77	24.65	17.08	230.8	4.594	58.62	18.44	17.98
#1	.0003	-.0062	.0025	.0015	.0164	.0002	.0003	.0003
#2	.0004	-.0072	.0024	-.0041	.0152	.0006	.0005	.0003
#3	.0006	-.0043	.0018	-.0010	.0151	.0004	.0003	.0004

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	.0024	.0006	-.0013
Stddev	.0010	.0003	.0001
%RSD	43.46	47.27	3.956
#1	.0017	.0007	-.0013
#2	.0020	.0003	-.0014
#3	.0036	.0009	-.0013

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/18/2016 17:27:59 Type: Unk
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2136.1	5663.5	42135.	3627.5
Stddev	2.8	11.1	86.	8.8
%RSD	.13258	.19636	.20514	.24185
#1	2134.1	5655.4	42036.	3635.8
#2	2139.3	5676.2	42169.	3618.3
#3	2134.7	5658.9	42199.	3628.4

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 5/18/2016 17:32:17 Type: Unk
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	F1.007	485.4	1.094	.5278	.5075	479.6	.9819	.4900	.5307
Stddev	.001	5.4	.004	.0023	.0011	4.8	.0004	.0006	.0029
%RSD	.1025	1.117	.3677	.4349	.2179	.9989	.0405	.1280	.5474
#1	1.006	484.3	1.091	.5257	.5063	474.4	.9815	.4905	.5285
#2	1.008	480.7	1.093	.5273	.5080	480.7	.9818	.4893	.5297
#3	1.007	491.3	1.099	.5303	.5083	483.8	.9823	.4902	.5340

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.5484	183.9	.2038	F505.3	.5236	.9319	.2600	.9845	.9786
Stddev	.0005	1.0	.0227	1.9	.0016	.0010	.0023	.0002	.0017
%RSD	.0921	.5622	11.15	.3740	.3119	.1043	.8904	.0213	.1771
#1	.5483	182.8	.2296	503.3	.5218	.9320	.2574	.9847	.9806
#2	.5480	184.1	.1954	507.0	.5240	.9309	.2618	.9843	.9777
#3	.5490	184.8	.1865	505.7	.5250	.9328	.2609	.9845	.9775

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.022	1.026	.0709	.9238	.9991	1.011	.9714	.4788	.9831
Stddev	.002	.002	.0007	.0010	.0032	.003	.0033	.0012	.0011
%RSD	.1711	.1711	.9639	.1092	.3211	.2995	.3368	.2530	.1127
#1	1.024	1.025	.0701	.9236	.9956	1.008	.9739	.4775	.9822
#2	1.021	1.026	.0714	.9229	.9999	1.012	.9677	.4791	.9826
#3	1.022	1.028	.0711	.9249	1.002	1.014	.9727	.4798	.9843

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2139.4	5712.2	42841.	3689.0
Stddev	2.6	8.2	367.	25.8
%RSD	.12127	.14322	.85718	.69998
#1	2138.8	5721.2	43234.	3704.8
#2	2142.3	5710.2	42781.	3659.2
#3	2137.2	5705.2	42507.	3703.1

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/18/2016 17:36:31 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2486	40.38	1.978	1.981	1.995	40.91	2.025	2.015	2.039	2.005
Stddev	.0010	.14	.002	.007	.007	.15	.006	.005	.004	.005
%RSD	.3867	.3406	.0859	.3503	.3622	.3773	.2922	.2541	.2056	.2282
#1	.2475	40.24	1.976	1.973	1.988	40.81	2.020	2.010	2.035	2.000
#2	.2493	40.52	1.979	1.984	2.002	41.09	2.023	2.013	2.043	2.007
#3	.2490	40.36	1.978	1.986	1.996	40.83	2.031	2.020	2.041	2.009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.49	40.14	40.61	2.043	2.003	40.40	2.007	2.004	1.980	1.979
Stddev	.27	.11	.22	.004	.007	.09	.004	.006	.002	.003
%RSD	.6506	.2719	.5423	.2082	.3420	.2230	.1843	.2995	.0761	.1418
#1	41.22	40.01	40.37	2.039	1.997	40.34	2.005	2.000	1.978	1.983
#2	41.76	40.22	40.80	2.047	2.002	40.50	2.004	2.002	1.979	1.978
#3	41.48	40.17	40.66	2.045	2.011	40.36	2.011	2.011	1.981	1.978
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.053	2.013	2.022	2.048	2.018	2.023	2.026
Stddev	.003	.003	.005	.004	.007	.003	.006
%RSD	.1621	.1646	.2613	.2160	.3646	.1253	.3171
#1	2.050	2.012	2.016	2.043	2.012	2.020	2.021
#2	2.053	2.011	2.027	2.050	2.015	2.025	2.024
#3	2.056	2.017	2.023	2.052	2.026	2.024	2.033
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/18/2016 17:36:31 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2380.7	6167.8	47558.	3774.0
Stddev	10.1	20.9	49.	40.2
%RSD	.42329	.33914	.10376	1.0651
#1	2388.8	6184.9	47614.	3802.6
#2	2383.8	6173.9	47523.	3728.0
#3	2369.4	6144.4	47537.	3791.2

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/18/2016 17:40:26 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0006	.0186	.0018	.0006	.0005	.0223	.0002	.0003	.0002
Stddev	.0002	.0039	.0008	.0001	.0001	.0024	.0000	.0001	.0001
%RSD	36.71	20.76	42.90	12.12	24.63	10.76	15.38	49.38	45.08
#1	-.0007	.0192	.0026	.0006	.0006	.0246	.0002	.0005	.0001
#2	-.0007	.0144	.0015	.0006	.0005	.0224	.0002	.0002	.0003
#3	-.0003	.0221	.0012	.0005	.0004	.0198	.0002	.0002	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	F.0513	.0418	.0141	.0003	F.0026	-.0078	.0001	-.0006
Stddev	.0001	.0060	.0187	.0198	.0001	.0006	.0072	.0001	.0000
%RSD	1734.	11.72	44.76	139.8	19.97	24.11	91.82	62.85	4.280
#1	.0001	.0566	.0634	-.0046	.0004	.0033	-.0008	.0002	-.0006
#2	.0001	.0526	.0314	.0122	.0003	.0027	-.0075	.0001	-.0005
#3	-.0002	.0448	.0305	.0348	.0003	.0020	-.0151	.0001	-.0006
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit		.0500				.0010			
Low Limit		-.0500				-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F.0023	.0004	.0012	.0005	.0004	.0019	.0011	.0005	.0001
Stddev	.0009	.0008	.0002	.0001	.0001	.0002	.0003	.0003	.0000
%RSD	40.44	180.7	19.24	20.09	33.39	9.008	23.54	61.88	22.29
#1	.0034	.0006	.0014	.0005	.0006	.0019	.0014	.0008	.0002
#2	.0018	.0012	.0013	.0006	.0004	.0020	.0009	.0002	.0001
#3	.0018	-.0004	.0010	.0004	.0003	.0017	.0010	.0006	.0001
Check ?	Chk Fail	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.0020								
Low Limit	-.0020								

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/18/2016 17:40:26 Type: QC
Method: 60102007_041712(v128) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2741.7	6425.1	49061.	3778.0
Stddev	8.1	16.7	108.	29.0
%RSD	.29458	.25981	.22014	.76711
#1	2735.6	6416.3	49026.	3760.1
#2	2750.9	6444.4	49182.	3762.4
#3	2738.7	6414.7	48975.	3811.4

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Ag 328.068 {103}	X	3	V	-0.009834	0.000000	No
			Fe	-0.000001	0.000000	No
			Mg	0.000002	0.000000	No
Al 396.152 { 85}	X	1	Mo	0.035224	0.000000	No
As 189.042 {478}	X	5	Fe	-0.000101	0.000000	No
			Cr	-0.000226	0.000000	No
			Mo	-0.000017	0.000000	No
			Al	0.000004	0.000000	No
			Ca	0.000002	0.000000	No
Ba 455.403 { 74}	X	1	Fe	0.000004	0.000000	No
Be 313.042 {108}	X	2	V	0.000115	0.000000	No
			Ti	-0.000059	0.000000	No
Ca 317.933 {106}	X	None				
Cd 226.502 {449}	X	4	Fe	0.000088	0.000000	No
			Ca	0.000001	0.000000	No
			Al	-0.000001	0.000000	No
			Ti	0.000151	0.000000	No
Co 228.616 {447}	X	3	Mo	-0.001220	0.000000	No
			Ti	0.003012	0.000000	No
			Fe	-0.000001	0.000000	No
Cr 267.716 {126}	X	3	Al	0.000005	0.000000	No
			Fe	-0.000018	0.000000	No
			Ca	0.000002	0.000000	No
Cu 324.754 {104}	X	10	Fe	-0.000184	0.000000	No
			Ca	0.000002	0.000000	No
			Mo	0.000528	0.000000	No
			Sn	-0.000012	0.000000	No
			V	-0.000158	0.000000	No
			Ti	-0.000251	0.000000	No
			Al	0.000004	0.000000	No
			Mg	0.000002	0.000000	No
			Co	-0.000787	0.000000	No
			Cd	0.000240	0.000000	No
Fe 259.940 {130}	X	None				
In 230.606 {446}*	X	None				
K 766.490 { 44}	X	None				
Mg 279.079 {121}	X	None				
Mn 257.610 {131}	X	2	Fe	0.000007	0.000000	No
			Mg	0.000001	0.000000	No
Mo 202.030 {467}	X	1	Fe	-0.000017	0.000000	No
Na 589.592 { 57}	X	None				
Ni 231.604 {445}	X	7	Fe	-0.000058	0.000000	No
			Co	-0.000054	0.000000	No
			Mo	0.000005	0.000000	No
			Sb	-0.000120	0.000000	No
			Al	0.000003	0.000000	No
			Be	-0.000269	0.000000	No
			Tl	0.000440	0.000000	No
Pb 220.353 {453}	X	9	Al	0.000294	0.000000	No
			Fe	-0.000008	0.000000	No
			Mo	-0.001012	0.000000	No
			Cu	0.001070	0.000000	No
			Ti	0.000036	0.000000	No
			Si	0.000071	0.000000	No
			Ca	-0.000001	0.000000	No
			Cr	0.000050	0.000000	No
			Mg	0.000004	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Sb 206.833 {463}	☒	10	Fe	-0.000002	0.000000	No
			Cr	0.012140	0.000000	No
			Mo	-0.004076	0.000000	No
			V	-0.000611	0.000000	No
			Sn	-0.010736	0.000000	No
			Ti	0.000040	0.000000	No
			Ca	-0.000001	0.000000	No
			Ni	-0.000438	0.000000	No
			Mg	-0.000002	0.000000	No
			Al	0.000003	0.000000	No
Se 196.090 {472}	☒	10	Fe	0.000010	0.000000	No
			Ca	-0.000001	0.000000	No
			Mn	0.000574	0.000000	No
			Mo	0.000111	0.000000	No
			Al	-0.000015	0.000000	No
			V	0.000000	0.000000	No
			Zn	0.000000	0.000000	No
			Sr	0.000137	0.000000	No
			As	-0.000032	0.000000	No
			Be	0.000212	0.000000	No
Si 212.412 {459}	☒	1	Mo	0.019120	0.000000	No
Sn 189.989 {477}	☒	None				
Sr 407.771 { 83}	☒	1	Ca	0.000017	0.000000	No
Ti 334.941 {101}	☒	1	Ca	-0.000007	0.000000	No
Tl 190.856 {477}	☒	11	Co	0.001145	0.000000	No
			Fe	0.000004	0.000000	No
			Al	-0.000011	0.000000	No
			Ba	-0.000051	0.000000	No
			Ti	-0.002651	0.000000	No
			Sb	0.000012	0.000000	No
			Ca	0.000003	0.000000	No
			Cr	0.000230	0.000000	No
			Mg	-0.000003	0.000000	No
			Mn	0.000818	0.000000	No
			V	-0.038621	0.000000	No
V 292.402 {115}	☒	5	Fe	0.000008	0.000000	No
			Cr	-0.002590	0.000000	No
			Mo	-0.005797	0.000000	No
			Ti	0.000364	0.000000	No
			Mn	-0.000693	0.000000	No
Y 224.306 {450}*	☒	None				
Y 360.073 { 94}*	☒	None				
Y 371.030 { 91}*	☒	None				
Zn 206.200 {463}	☒	5	Cr	-0.000965	0.000000	No
			Al	0.000005	0.000000	No
			Ca	0.000003	0.000000	No
			Fe	0.000006	0.000000	No
			As	0.001128	0.000000	No

SGS ACCUTEST FA33973

Element, Wavelength and Order	Date of Fit	Date of Cal.	Type of Fit	Weighting	A0	A1	A2	n (Exponent)
Ag 328.068 {103}	5/18/2016 10:31:26	5/18/2016 9:54:54	Linear	1/Conc	-0.001550	0.615586	0.000000	1.000000
Al 396.152 { 85}	5/18/2016 10:31:26	5/18/2016 9:54:54	Linear	1/Conc	-0.000398	0.193003	0.000000	1.000000
As 189.042 {478}	5/18/2016 10:31:26	5/18/2016 9:54:54	Linear	1/Conc	-0.000006	0.254433	0.000000	1.000000
Ba 455.403 { 74}	5/18/2016 10:31:26	5/18/2016 9:54:54	Linear	1/Conc	0.026055	15.631034	0.000000	1.000000
Be 313.042 {108}	5/18/2016 10:31:26	5/18/2016 9:54:54	Linear	1/Conc	0.004350	8.884737	0.000000	1.000000
Ca 317.933 {106}	5/18/2016 10:31:26	5/18/2016 9:54:54	Linear	1/Conc	0.011383	0.281712	0.000000	1.000000
Cd 226.502 {449}	5/18/2016 10:31:26	5/18/2016 9:54:54	Linear	1/Conc	0.000557	5.713502	0.000000	1.000000
Co 228.616 {447}	5/18/2016 10:31:26	5/18/2016 9:54:54	Linear	1/Conc	0.000764	2.692148	0.000000	1.000000
Cr 267.716 {126}	5/18/2016 10:31:26	5/18/2016 9:54:54	Linear	1/Conc	0.000216	0.460725	0.000000	1.000000
Cu 324.754 {104}	5/18/2016 10:31:26	5/18/2016 9:54:54	Linear	1/Conc	0.004019	0.714735	0.000000	1.000000
Fe 259.940 {130}	5/18/2016 10:31:26	5/18/2016 9:54:54	Linear	1/Conc	0.004054	0.173005	0.000000	1.000000
In 230.606 {446}*	5/18/2016 10:31:26	5/5/2010 12:30:54	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
K 766.490 { 44}	5/18/2016 10:31:26	5/18/2016 9:54:54	Linear	1/Conc	-0.012290	0.175651	0.000000	1.000000
Mg 279.079 {121}	5/18/2016 10:31:26	5/18/2016 9:54:54	Linear	1/Conc	-0.000290	0.027384	0.000000	1.000000
Mn 257.610 {131}	5/18/2016 10:31:26	5/18/2016 9:54:54	Linear	1/Conc	0.001426	3.080524	0.000000	1.000000
Mo 202.030 {467}	5/18/2016 10:31:26	5/18/2016 9:54:54	Linear	1/Conc	0.002558	1.468550	0.000000	1.000000
Na 589.592 { 57}	5/18/2016 10:31:26	5/18/2016 9:54:54	Linear	1/Conc	0.002042	0.490570	0.000000	1.000000
Ni 231.604 {445}	5/18/2016 10:31:26	5/18/2016 9:54:54	Linear	1/Conc	0.000709	1.751049	0.000000	1.000000
Pb 220.353 {453}	5/18/2016 10:31:26	5/18/2016 9:54:54	Linear	1/Conc	-0.001300	1.362682	0.000000	1.000000
Sb 206.833 {463}	5/18/2016 10:31:26	5/18/2016 9:54:54	Linear	1/Conc	0.001244	0.275990	0.000000	1.000000
Se 196.090 {472}	5/18/2016 10:31:26	5/18/2016 9:54:54	Linear	1/Conc	0.000116	0.178003	0.000000	1.000000
Si 212.412 {459}	5/18/2016 10:31:26	5/18/2016 9:54:54	Linear	1/Conc	0.005749	0.447038	0.000000	1.000000
Sn 189.989 {477}	5/18/2016 10:31:26	5/18/2016 9:54:54	Linear	1/Conc	0.000350	0.583742	0.000000	1.000000
Sr 407.771 { 83}	5/18/2016 10:31:26	5/18/2016 9:54:54	Linear	1/Conc	0.013875	20.512547	0.000000	1.000000
Ti 334.941 {101}	5/18/2016 10:31:26	5/18/2016 9:54:54	Linear	1/Conc	0.002472	2.007620	0.000000	1.000000
Tl 190.856 {477}	5/18/2016 10:31:26	5/18/2016 9:54:54	Linear	1/Conc	-0.003339	0.631048	0.000000	1.000000
V 292.402 {115}	5/18/2016 10:31:26	5/18/2016 9:54:54	Linear	1/Conc	0.000051	0.718216	0.000000	1.000000
Y 224.306 {450}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 360.073 { 94}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 371.030 { 91}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Zn 206.200 {463}	5/18/2016 10:31:26	5/18/2016 9:54:54	Linear	1/Conc	0.003137	3.653206	0.000000	1.000000

	Element, Wavelength and Order	Correlation	Std Error of Est	Predicted MDL	Predicted MQL	Status	Reslope		QC Norm	
							Slope	Y-int	Slope factor	Offset
	Ag 328.068 {103}	0.999893	0.000083	0.000418	0.001393	OK.	1.000000	0.000000	1	0
	Al 396.152 { 85}	0.999735	0.007169	0.011109	0.037032	OK.	1.000000	0.000000	1	0
	As 189.042 {478}	0.999860	0.000342	0.000656	0.002188	OK.	1.000000	0.000000	1	0
	Ba 455.403 { 74}	0.999904	0.017483	0.000198	0.000660	OK.	1.000000	0.000000	1	0
	Be 313.042 {108}	0.999913	0.009422	0.000090	0.000299	OK.	1.000000	0.000000	1	0
	Ca 317.933 {106}	0.999852	0.007797	0.003435	0.011451	OK.	1.000000	0.000000	1	0
	Cd 226.502 {449}	0.999978	0.003086	0.000045	0.000149	OK.	1.000000	0.000000	1	0
	Co 228.616 {447}	0.999974	0.001570	0.000102	0.000341	OK.	1.000000	0.000000	1	0
	Cr 267.716 {126}	0.999904	0.000514	0.000315	0.001051	OK.	1.000000	0.000000	1	0
	Cu 324.754 {104}	0.999872	0.000919	0.000302	0.001008	OK.	1.000000	0.000000	1	0
	Fe 259.940 {130}	0.999859	0.004677	0.002775	0.009249	OK.	1.000000	0.000000	1	0
	In 230.606 {446}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	K 766.490 { 44}	0.999735	0.006509	0.025329	0.084430	OK.	1.000000	0.000000	1	0
	Mg 279.079 {121}	0.999944	0.000469	0.021577	0.071922	OK.	1.000000	0.000000	1	0
	Mn 257.610 {131}	0.999999	0.000275	0.000043	0.000145	OK.	1.000000	0.000000	1	0
	Mo 202.030 {467}	0.999965	0.000989	0.000120	0.000399	OK.	1.000000	0.000000	1	0
	Na 589.592 { 57}	0.999792	0.016118	0.008960	0.029866	OK.	1.000000	0.000000	1	0
	Ni 231.604 {445}	0.999985	0.000762	0.000157	0.000525	OK.	1.000000	0.000000	1	0
	Pb 220.353 {453}	0.999659	0.002884	0.000468	0.001559	OK.	1.000000	0.000000	1	0
	Sb 206.833 {463}	0.999861	0.000369	0.000978	0.003261	OK.	1.000000	0.000000	1	0
	Se 196.090 {472}	0.999922	0.000180	0.001438	0.004792	OK.	1.000000	0.000000	1	0
	Si 212.412 {459}	0.999877	0.000575	0.000428	0.001427	OK.	1.000000	0.000000	1	0
	Sn 189.989 {477}	0.999928	0.000563	0.000240	0.000798	OK.	1.000000	0.000000	1	0
	Sr 407.771 { 83}	0.999998	0.003331	0.000089	0.000296	OK.	1.000000	0.000000	1	0
	Ti 334.941 {101}	0.999986	0.000869	0.000116	0.000388	OK.	1.000000	0.000000	1	0
	Tl 190.856 {477}	0.999888	0.000729	0.000633	0.002112	OK.	1.000000	0.000000	1	0
	V 292.402 {115}	0.999982	0.000347	0.000263	0.000875	OK.	1.000000	0.000000	1	0
	Y 224.306 {450}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Y 360.073 { 94}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Y 371.030 { 91}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Zn 206.200 {463}	0.999976	0.002030	0.000051	0.000172	OK.	1.000000	0.000000	1	0

Zoom In ▶ Zoom Out

Sample Name: Blank Acquired: 5/19/2016 9:50:42 Type: Cal
Method: 60102007_041712(v130) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.0013	.0001	-.0005	.0118	.0000	.0063	-.0005	.0000	.0000
Stddev	.0002	.0006	.0001	.0017	.0004	.0006	.0001	.0001	.0001
%RSD	11.76	505.8	15.56	14.44	13300.	9.076	17.52	204.3	131.3
#1	-.0013	.0006	-.0005	.0121	-.0005	.0069	-.0005	.0000	.0000
#2	-.0012	-.0005	-.0004	.0134	.0002	.0062	-.0006	.0001	.0000
#3	-.0015	.0003	-.0006	.0100	.0003	.0058	-.0004	.0000	.0001

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0044	.0010	-.0070	-.0002	.0002	.0004	-.0071	.0001	-.0011
Stddev	.0001	.0003	.0013	.0004	.0001	.0002	.0017	.0002	.0005
%RSD	2.860	28.95	19.20	146.5	45.51	54.20	24.53	225.1	48.19
#1	.0045	.0007	-.0058	-.0005	.0001	.0006	-.0057	.0003	-.0005
#2	.0043	.0013	-.0084	-.0004	.0003	.0005	-.0091	-.0001	-.0014
#3	.0044	.0010	-.0067	.0002	.0002	.0002	-.0067	.0000	-.0013

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0009	.0003	.0050	.0002	.0018	.0014	-.0049	-.0002	.0016
Stddev	.0001	.0002	.0001	.0000	.0004	.0000	.0002	.0001	.0002
%RSD	15.00	65.16	1.577	15.22	20.31	1.546	4.649	45.24	10.51
#1	.0010	.0001	.0049	.0001	.0021	.0014	-.0051	-.0001	.0016
#2	.0008	.0005	.0051	.0002	.0019	.0014	-.0047	-.0003	.0014
#3	.0008	.0002	.0050	.0002	.0014	.0014	-.0051	-.0001	.0017

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2729.5	6183.1	54446.	5340.7
Stddev	7.5	9.1	72.	19.3
%RSD	.27338	.14787	.13287	.36081
#1	2726.0	6179.5	54458.	5342.1
#2	2738.1	6193.5	54511.	5359.2
#3	2724.5	6176.3	54368.	5320.8

◀ Zoom In ▶ Zoom Out

Sample Name: LowStd Acquired: 5/19/2016 9:55:06 Type: Cal
Method: 60102007_041712(v130) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0338	1.706	.1221	7.537	4.294	2.520	2.677	1.319	.2022	.3545
Stddev	.0003	.004	.0004	.020	.015	.005	.003	.002	.0010	.0013
%RSD	.8240	.2449	.3165	.2694	.3535	.1903	.0947	.1160	.4965	.3782
#1	.0336	1.711	.1218	7.546	4.304	2.525	2.674	1.318	.2024	.3536
#2	.0341	1.704	.1226	7.551	4.302	2.519	2.678	1.319	.2031	.3561
#3	.0337	1.704	.1221	7.513	4.277	2.516	2.678	1.321	.2011	.3539

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.447	1.496	.2410	1.417	.6497	4.251	.8714	.5888	.1361	.0873
Stddev	.002	.002	.0017	.004	.0010	.011	.0021	.0008	.0002	.0004
%RSD	.1343	.1360	.6884	.2533	.1479	.2646	.2420	.1382	.1757	.4076
#1	1.448	1.498	.2429	1.419	.6487	4.260	.8691	.5881	.1360	.0870
#2	1.449	1.494	.2405	1.419	.6498	4.253	.8732	.5885	.1364	.0872
#3	1.445	1.495	.2397	1.413	.6506	4.238	.8720	.5897	.1359	.0877

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.2294	.2939	9.970	.7154	.2669	.3353	1.632
Stddev	.0005	.0006	.022	.0016	.0003	.0006	.001
%RSD	.1967	.2178	.2243	.2304	.1002	.1766	.0455
#1	.2289	.2933	9.973	.7162	.2670	.3352	1.631
#2	.2297	.2946	9.991	.7165	.2665	.3360	1.632
#3	.2297	.2937	9.946	.7135	.2670	.3348	1.632

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2590.3	6088.9	54261.	5458.8
Stddev	5.1	10.4	215.	39.5
%RSD	.19618	.17052	.39573	.72387
#1	2595.4	6100.7	54360.	5416.1
#2	2590.3	6081.3	54015.	5494.1
#3	2585.2	6084.8	54408.	5466.2

◀ Zoom In ▶ Zoom Out

Sample Name: MidStd Acquired: 5/19/2016 9:59:15 Type: Cal
Method: 60102007_041712(v130) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1392	7.193	.5071	30.76	17.55	10.51	10.85	5.281	.8168	1.443
Stddev	.0026	.021	.0010	.15	.06	.02	.00	.001	.0152	.028
%RSD	1.870	.2907	.1932	.4896	.3378	.2272	.0444	.0228	1.862	1.915
#1	.1381	7.210	.5076	30.89	17.61	10.52	10.84	5.282	.8069	1.435
#2	.1422	7.169	.5076	30.59	17.49	10.48	10.85	5.280	.8343	1.473
#3	.1374	7.198	.5059	30.78	17.54	10.52	10.85	5.282	.8092	1.419

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5.733	6.334	1.011	5.795	2.634	18.00	3.470	2.473	.5559	.3595
Stddev	.020	.023	.004	.101	.001	.06	.004	.000	.0011	.0009
%RSD	.3435	.3591	.3940	1.735	.0323	.3348	.1174	.0164	.2064	.2587
#1	5.753	6.351	1.010	5.736	2.633	18.06	3.475	2.473	.5570	.3605
#2	5.714	6.308	1.008	5.911	2.634	17.94	3.469	2.473	.5561	.3588
#3	5.730	6.343	1.015	5.738	2.635	18.01	3.468	2.473	.5547	.3591

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.9852	1.159	40.17	2.938	1.113	1.360	6.597
Stddev	.0011	.002	.16	.055	.002	.025	.003
%RSD	.1154	.1430	.4005	1.858	.1516	1.835	.0515
#1	.9865	1.161	40.35	2.915	1.111	1.347	6.596
#2	.9847	1.157	40.05	3.001	1.114	1.388	6.594
#3	.9844	1.158	40.10	2.899	1.114	1.344	6.600

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2374.6	5907.6	52071.	5448.6
Stddev	2.0	3.4	759.	37.3
%RSD	.08514	.05689	1.4579	.68410
#1	2374.7	5903.7	52692.	5473.7
#2	2372.6	5909.2	51225.	5466.4
#3	2376.6	5909.8	52297.	5405.8

◀ Zoom In ▶ Zoom Out

Sample Name: HighStd Acquired: 5/19/2016 10:02:42 Type: Cal
Method: 60102007_041712(v130) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.2769	14.37	1.022	61.08	34.77	20.72	21.37	10.46	1.590	2.831
Stddev	.0005	.03	.002	.46	.07	.07	.07	.02	.005	.006
%RSD	.1839	.2298	.1928	.7496	.2003	.3370	.3258	.2214	.2919	.2059
#1	.2774	14.34	1.021	60.62	34.71	20.65	21.35	10.45	1.586	2.831
#2	.2768	14.41	1.022	61.08	34.85	20.79	21.31	10.44	1.596	2.825
#3	.2764	14.36	1.025	61.54	34.75	20.71	21.45	10.48	1.589	2.836

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	10.78	12.61	1.994	11.08	5.224	35.63	6.841	5.039	1.125	.7203
Stddev	.04	.03	.013	.05	.011	.08	.020	.009	.001	.0012
%RSD	.3917	.2044	.6405	.4551	.2190	.2170	.2878	.1865	.1100	.1726
#1	10.74	12.59	1.983	11.03	5.218	35.57	6.827	5.031	1.124	.7191
#2	10.82	12.64	2.008	11.13	5.217	35.71	6.831	5.037	1.124	.7204
#3	10.77	12.60	1.991	11.08	5.237	35.59	6.863	5.049	1.126	.7215

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.884	2.248	78.95	5.564	2.237	2.629	13.00
Stddev	.003	.008	1.55	.041	.005	.007	.05
%RSD	.1761	.3668	1.969	.7357	.2046	.2867	.3749
#1	1.881	2.242	78.41	5.579	2.235	2.623	12.99
#2	1.885	2.245	80.70	5.517	2.234	2.637	12.95
#3	1.888	2.257	77.74	5.595	2.242	2.627	13.05

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2196.0	5666.0	51019.	5311.3
Stddev	7.3	25.0	185.	55.7
%RSD	.33227	.44141	.36323	1.0484
#1	2199.9	5675.7	51176.	5365.3
#2	2200.5	5684.7	50814.	5254.1
#3	2187.6	5637.6	51067.	5314.5

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Zoom In Zoom Out

Sample Name: HSTD Acquired: 5/19/2016 10:16:38 Type: QC
Method: 60102007_041712(v130) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4965	79.67	4.067	4.029	3.967	79.23	4.000	4.006	3.923	3.961
Stddev	.0006	.31	.004	.033	.014	.34	.005	.004	.007	.004
%RSD	.1279	.3881	.1063	.8166	.3440	.4229	.1278	.1051	.1797	.1128
#1	.4968	80.00	4.066	4.067	3.982	79.54	3.999	4.006	3.926	3.966
#2	.4957	79.62	4.063	4.007	3.956	79.27	3.995	4.003	3.928	3.957
#3	.4968	79.38	4.072	4.014	3.961	78.87	4.005	4.011	3.915	3.961
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	77.48	79.84	79.71	3.931	4.015	79.27	4.015	4.043	4.061	4.051
Stddev	.21	.30	.17	.032	.009	.35	.006	.004	.002	.008
%RSD	.2676	.3761	.2088	.8237	.2128	.4398	.1493	.1004	.0567	.2049
#1	77.71	80.18	79.83	3.945	4.012	79.66	4.015	4.043	4.063	4.048
#2	77.45	79.61	79.78	3.894	4.008	79.18	4.010	4.039	4.059	4.045
#3	77.30	79.73	79.52	3.954	4.024	78.98	4.022	4.047	4.063	4.061
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.001	4.005	3.939	3.911	4.002	3.963	3.999
Stddev	.004	.006	.040	.018	.001	.004	.005
%RSD	.1131	.1422	1.025	.4509	.0130	.0902	.1339
#1	4.007	4.003	3.939	3.897	4.002	3.959	3.997
#2	3.999	4.001	3.980	3.906	4.002	3.966	3.994
#3	3.999	4.011	3.899	3.931	4.001	3.963	4.005
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: HSTD Acquired: 5/19/2016 10:16:38 Type: QC
Method: 60102007_041712(v130) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2185.1	5593.7	51254.	5336.7
Stddev	4.6	11.6	148.	20.5
%RSD	.20866	.20731	.28806	.38427
#1	2188.5	5599.1	51381.	5334.3
#2	2187.0	5601.5	51289.	5317.5
#3	2179.9	5580.3	51092.	5358.3

Zoom In Zoom Out

Sample Name: ICV Acquired: 5/19/2016 10:23:26 Type: QC
Method: 60102007_041712(v130) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2487	41.33	2.056	2.143	2.085	42.19	2.072	2.091	2.034	2.021
Stddev	.0007	.18	.002	.006	.007	.18	.002	.002	.011	.004
%RSD	.2649	.4373	.0866	.2841	.3477	.4335	.0826	.1147	.5591	.1713
#1	.2490	41.53	2.054	2.150	2.094	42.39	2.070	2.090	2.046	2.025
#2	.2479	41.17	2.057	2.139	2.081	42.03	2.071	2.089	2.030	2.019
#3	.2491	41.29	2.057	2.140	2.081	42.15	2.073	2.093	2.024	2.019
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.79	42.54	42.90	2.100	1.929	42.51	2.106	2.045	2.071	2.090
Stddev	.16	.09	.26	.004	.005	.16	.003	.002	.006	.003
%RSD	.4032	.2143	.5970	.1840	.2751	.3745	.1280	.1086	.3111	.1517
#1	40.98	42.63	43.19	2.105	1.927	42.67	2.104	2.044	2.073	2.090
#2	40.67	42.45	42.78	2.098	1.925	42.35	2.105	2.048	2.064	2.087
#3	40.73	42.53	42.72	2.098	1.935	42.52	2.109	2.044	2.076	2.094
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0770	2.080	1.969	1.950	2.117	1.909	2.089
Stddev	.0002	.001	.006	.011	.004	.008	.002
%RSD	.2980	.0473	.3104	.5376	.1894	.4090	.0805
#1	.0773	2.079	1.976	1.961	2.112	1.917	2.088
#2	.0768	2.080	1.964	1.948	2.118	1.906	2.090
#3	.0769	2.081	1.968	1.940	2.120	1.902	2.091
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: ICV Acquired: 5/19/2016 10:23:26 Type: QC
Method: 60102007_041712(v130) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2339.3	5750.2	52384.	5412.8
Stddev	5.0	11.1	145.	39.8
%RSD	.21176	.19363	.27675	.73503
#1	2344.7	5761.6	52217.	5384.1
#2	2335.0	5749.8	52468.	5458.2
#3	2338.2	5739.3	52467.	5396.1

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Zoom In Zoom Out

Sample Name: ICB Acquired: 5/19/2016 10:28:08 Type: QC
Method: 60102007_041712(v130) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0047	.0006	.0003	.0003	.0079	.0001	.0001	.0004
Stddev	.0001	.0068	.0004	.0001	.0000	.0035	.0001	.0001	.0002
%RSD	46.52	142.9	76.59	20.03	14.14	44.18	91.87	122.6	39.74
#1	.0003	.0050	.0004	.0003	.0004	.0114	.0001	.0002	.0005
#2	.0002	-.0021	.0003	.0004	.0004	.0081	.0001	.0000	.0002
#3	.0001	.0114	.0011	.0003	.0003	.0044	.0000	.0001	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0145	-.0007	.0079	.0001	F.0017	.0157	.0001	.0001
Stddev	.0001	.0054	.0087	.0162	.0000	.0004	.0054	.0001	.0003
%RSD	37.41	37.10	1327.	205.2	28.29	22.14	34.29	78.58	200.8
#1	.0003	.0191	-.0076	.0202	.0002	.0022	.0218	.0003	.0004
#2	.0002	.0158	.0091	.0140	.0001	.0017	.0134	.0000	-.0002
#3	.0002	.0086	-.0036	-.0105	.0001	.0014	.0118	.0002	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0000	.0006	.0004	.0004	.0009	.0013	.0001	.0000
Stddev	.0010	.001	.0002	.0002	.0001	.0001	.0006	.0003	.000
%RSD	850.6	2600.	35.40	64.01	30.32	6.603	45.83	370.0	572.6
#1	.0011	.0011	.0008	.0002	.0005	.0009	.0010	.0004	.0000
#2	.0001	-.0009	.0006	.0006	.0004	.0009	.0020	-.0001	.0000
#3	-.0009	-.0004	.0004	.0003	.0003	.0008	.0010	-.0001	.0000
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: ICB Acquired: 5/19/2016 10:28:08 Type: QC
Method: 60102007_041712(v130) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2729.8	6087.2	54875.	5462.4
Stddev	3.3	4.0	206.	29.2
%RSD	.12264	.06595	.37573	.53401
#1	2733.1	6091.2	55102.	5491.7
#2	2726.4	6083.2	54821.	5433.4
#3	2729.8	6087.2	54701.	5462.2

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/19/2016 10:33:01 Type: QC
Method: 60102007_041712(v130) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0094	.2160	.0103	.2140	.0053	1.070	.0054	.0543	.0108	.0266
Stddev	.0002	.0061	.0010	.0011	.0000	.004	.0000	.0002	.0002	.0002
%RSD	2.005	2.828	9.372	.5183	.7476	.3846	.3456	.3175	1.637	.6416
#1	.0094	.2198	.0113	.2147	.0053	1.066	.0055	.0541	.0106	.0265
#2	.0092	.2192	.0093	.2127	.0053	1.069	.0054	.0545	.0108	.0266
#3	.0096	.2089	.0103	.2145	.0053	1.074	.0054	.0543	.0109	.0268
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3104	10.55	5.340	.0165	.0498	10.54	.0436	.0046	.0045	.0109
Stddev	.0014	.04	.030	.0000	.0003	.03	.0002	.0000	.0009	.0002
%RSD	.4653	.3736	.5700	.1577	.5427	.3225	.4463	.6568	19.93	1.637
#1	.3113	10.56	5.370	.0165	.0498	10.56	.0435	.0046	.0048	.0110
#2	.3087	10.51	5.340	.0165	.0501	10.50	.0439	.0046	.0052	.0110
#3	.3111	10.59	5.309	.0165	.0496	10.56	.0435	.0046	.0035	.0107
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0514	.0533	.0104	.0101	.0109	.0491	.0216
Stddev	.0003	.0004	.0001	.0001	.0002	.0003	.0001
%RSD	.5860	.7988	.5420	.5498	1.986	.6052	.4839
#1	.0511	.0537	.0104	.0100	.0111	.0494	.0215
#2	.0514	.0529	.0103	.0101	.0110	.0492	.0217
#3	.0517	.0532	.0104	.0101	.0107	.0488	.0215
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/19/2016 10:33:01 Type: QC
Method: 60102007_041712(v130) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2625.6	5994.4	54093.	5416.7
Stddev	4.6	16.6	104.	63.7
%RSD	.17410	.27621	.19221	1.1758
#1	2628.2	5988.9	54058.	5447.7
#2	2620.3	5981.2	54011.	5459.1
#3	2628.3	6013.0	54210.	5343.5

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/19/2016 10:38:22 Type: QC
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	501.0	-.0001	.0007	.0001	467.4	.0000	-.0002	.0009	.0000
Stddev	.0002	2.1	.0010	.0000	.0000	2.7	.0001	.0000	.0002	.000
%RSD	350.4	.4146	943.9	6.764	33.66	.5671	943.6	3.570	22.13	465.8
#1	-.0003	498.8	-.0011	.0007	.0001	468.9	-.0002	-.0002	.0010	-.0003
#2	.0001	503.0	.0000	.0007	.0001	464.4	.0001	-.0002	.0010	.0000
#3	.0000	501.2	.0008	.0008	.0001	469.0	.0001	-.0002	.0007	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	179.2	.0506	510.4	.0005	-.0001	.1740	.0000	-.0002	.0000	-.0001
Stddev	.9	.0102	2.5	.0001	.0001	.0026	.0003	.0016	.0033	.0028
%RSD	.4909	20.25	.4825	10.05	77.74	1.511	1014.	691.0	12660.	2361.
#1	179.8	.0573	512.2	.0005	-.0001	.1739	.0003	.0014	.0018	-.0031
#2	178.2	.0556	507.6	.0006	-.0002	.1714	.0000	-.0017	.0020	.0004
#3	179.6	.0388	511.5	.0005	-.0001	.1766	-.0002	-.0004	-.0038	.0024
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0156	.0006	.0001	.0005	.0000	.0007	-.0013
Stddev	.0011	.0001	.0001	.0001	.0015	.0002	.0001
%RSD	6.893	22.68	101.5	15.88	5028.	31.47	5.402
#1	.0157	.0005	.0002	.0006	-.0011	.0007	-.0014
#2	.0145	.0007	.0001	.0006	-.0006	.0005	-.0013
#3	.0167	.0006	.0000	.0004	.0018	.0009	-.0013
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/19/2016 10:38:22 Type: QC
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2103.4	5403.5	47106.	5213.6
Stddev	6.0	7.1	127.	33.0
%RSD	.28476	.13170	.26973	.63340
#1	2107.0	5410.4	47084.	5203.9
#2	2096.5	5403.8	46992.	5250.3
#3	2106.7	5396.2	47243.	5186.5

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 5/19/2016 10:45:21 Type: QC
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.007	480.2	1.114	.5363	.5054	463.8	.9831	.4921	.5086	.5444
Stddev	.001	7.2	.002	.0019	.0016	5.2	.0015	.0007	.0014	.0008
%RSD	.0971	1.500	.1686	.3620	.3185	1.129	.1533	.1340	.2804	.1530
#1	1.006	472.6	1.117	.5375	.5057	457.8	.9844	.4927	.5077	.5452
#2	1.007	486.9	1.113	.5340	.5036	466.5	.9814	.4914	.5102	.5436
#3	1.008	481.0	1.113	.5373	.5068	467.2	.9833	.4920	.5078	.5444
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	179.7	.0546	509.3	.5160	.9355	.1754	.9966	.9785	1.040	1.041
Stddev	.5	.0154	1.6	.0010	.0010	.0010	.0021	.0005	.002	.003
%RSD	.2772	28.20	.3068	.1943	.1054	.5897	.2091	.0524	.2261	.2891
#1	179.6	.0705	508.5	.5156	.9366	.1764	.9987	.9790	1.039	1.044
#2	179.3	.0536	508.3	.5172	.9349	.1743	.9946	.9780	1.043	1.041
#3	180.3	.0398	511.1	.5153	.9350	.1754	.9965	.9784	1.038	1.038
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0678	.9477	.9903	.9816	.9650	.4729	.9790
Stddev	.0006	.0017	.0036	.0011	.0011	.0007	.0018
%RSD	.8237	.1768	.3656	.1169	.1132	.1419	.1868
#1	.0674	.9484	.9916	.9814	.9637	.4722	.9806
#2	.0675	.9458	.9862	.9829	.9659	.4733	.9770
#3	.0684	.9489	.9930	.9806	.9653	.4733	.9796
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 5/19/2016 10:45:21 Type: QC
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2064.3	5311.8	47365.	5238.9
Stddev	1.4	5.9	198.	33.2
%RSD	.06866	.11120	.41728	.63364
#1	2065.9	5308.2	47450.	5267.0
#2	2064.1	5318.6	47139.	5247.4
#3	2063.1	5308.7	47505.	5202.3

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/19/2016 10:51:09 Type: QC
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2526	40.47	2.048	2.063	2.033	40.64	2.065	2.062	2.005	2.011
Stddev	.0008	.10	.007	.004	.001	.08	.002	.002	.005	.005
%RSD	.3023	.2396	.3388	.2050	.0457	.2017	.1109	.1013	.2728	.2727
#1	.2528	40.51	2.043	2.067	2.034	40.66	2.064	2.060	2.000	2.007
#2	.2532	40.36	2.046	2.061	2.032	40.55	2.064	2.062	2.011	2.008
#3	.2518	40.53	2.056	2.059	2.033	40.71	2.068	2.064	2.004	2.017
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.50	40.97	40.77	2.057	2.057	40.63	2.068	2.019	2.036	2.044
Stddev	.07	.07	.03	.006	.005	.05	.001	.002	.004	.004
%RSD	.1716	.1648	.0644	.3131	.2337	.1109	.0492	.0762	.1822	.1956
#1	41.49	41.05	40.80	2.053	2.052	40.68	2.067	2.017	2.032	2.040
#2	41.44	40.92	40.77	2.065	2.056	40.59	2.068	2.019	2.036	2.044
#3	41.58	40.94	40.75	2.054	2.062	40.63	2.068	2.020	2.039	2.048
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.121	2.083	2.045	2.036	2.031	2.028	2.057
Stddev	.003	.001	.003	.008	.006	.002	.001
%RSD	.1376	.0421	.1263	.3844	.2872	.1135	.0576
#1	2.119	2.084	2.048	2.027	2.033	2.025	2.058
#2	2.119	2.083	2.043	2.038	2.025	2.029	2.056
#3	2.124	2.082	2.045	2.042	2.036	2.029	2.056
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/19/2016 10:51:09 Type: QC
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2314.6	5735.5	52145.	5324.6
Stddev	3.8	6.7	205.	41.8
%RSD	.16247	.11681	.39229	.78543
#1	2318.9	5742.7	52293.	5342.0
#2	2312.0	5734.5	51912.	5354.9
#3	2313.0	5729.4	52231.	5276.9

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/19/2016 10:58:49 Type: QC
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0080	.0004	.0005	.0005	.0230	.0002	.0002	.0004	.0005
Stddev	.0001	.0038	.0005	.0002	.0000	.0048	.0001	.0000	.0001	.0000
%RSD	27.87	47.34	104.6	43.50	8.280	20.92	49.99	8.325	29.46	8.786
#1	.0004	.0059	.0002	.0004	.0004	.0190	.0004	.0002	.0005	.0005
#2	.0003	.0124	.0002	.0007	.0005	.0284	.0002	.0002	.0003	.0005
#3	.0003	.0057	.0010	.0003	.0005	.0217	.0001	.0002	.0004	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0246	.0255	.0150	.0004	.0007	.0215	.0001	-.0003	.0000	.0005
Stddev	.0043	.0137	.0026	.0000	.0002	.0045	.0001	.0004	.0009	.0003
%RSD	17.38	53.84	17.45	12.32	34.59	20.88	129.0	131.5	2031.	60.43
#1	.0233	.0101	.0158	.0004	.0009	.0256	.0003	-.0005	.0003	.0004
#2	.0294	.0364	.0121	.0004	.0005	.0167	.0001	.0002	.0007	.0003
#3	.0212	.0299	.0172	.0003	.0006	.0220	.0000	-.0007	-.0009	.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0021	.0005	.0005	.0005	-.0004	.0003	.0000
Stddev	.0002	.0002	.0001	.0001	.0008	.0002	.0001
%RSD	8.890	49.72	12.49	11.45	220.7	69.81	289.6
#1	.0023	.0007	.0004	.0006	.0005	.0005	.0002
#2	.0020	.0002	.0006	.0005	-.0004	.0001	.0000
#3	.0020	.0005	.0005	.0005	-.0012	.0004	-.0001
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/19/2016 10:58:49 Type: QC
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2669.3	6004.2	53675.	5240.6
Stddev	5.8	15.4	297.	8.7
%RSD	.21821	.25600	.55336	.16563
#1	2663.7	5989.5	53998.	5239.3
#2	2675.3	6020.2	53614.	5232.6
#3	2668.8	6002.9	53414.	5249.8

Zoom In Zoom Out

Sample Name: FA33957-21 Acquired: 5/19/2016 11:02:53 Type: Unk
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 4.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0024	4.558	.0164	.0166	.0011	381.0	.0130	.0391	.0174
Stddev	.0014	.018	.0007	.0003	.0002	.9	.0002	.0003	.0006
%RSD	58.67	.3840	4.413	1.691	17.50	.2473	1.194	.7103	3.197
#1	.0008	4.577	.0160	.0164	.0011	381.4	.0129	.0394	.0170
#2	.0030	4.555	.0172	.0169	.0014	381.7	.0129	.0391	.0172
#3	.0034	4.543	.0160	.0165	.0010	380.0	.0132	.0389	.0180

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0068	2.923	8.758	508.9	F27.81	-.0010	104.8	.3032	.0044
Stddev	.0008	.017	.066	.9	.30	.0004	.2	.0007	.0010
%RSD	12.38	.5864	.7527	.1705	1.069	41.44	.1785	.2234	23.30
#1	.0077	2.904	8.823	508.7	27.49	-.0013	104.8	.3040	.0036
#2	.0060	2.935	8.759	509.8	28.08	-.0011	105.0	.3027	.0040
#3	.0066	2.932	8.691	508.1	27.84	-.0005	104.7	.3029	.0055

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0028	.0068	31.28	-.0010	.1731	.0905	.0100	.0439	.0775
Stddev	.0010	.0073	.04	.0007	.0003	.0004	.0015	.0003	.0002
%RSD	34.63	107.1	.1384	65.94	.1730	.4744	15.41	.6780	.3017
#1	-.0017	.0133	31.24	-.0015	.1730	.0910	.0094	.0441	.0774
#2	-.0032	-.0011	31.27	-.0003	.1734	.0901	.0117	.0440	.0777
#3	-.0036	.0083	31.33	-.0012	.1728	.0904	.0088	.0435	.0773

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2375.1	5705.2	50521.	5269.1
Stddev	.3	5.6	211.	14.3
%RSD	.01350	.09857	.41698	.27164
#1	2375.1	5703.5	50753.	5276.4
#2	2374.8	5700.6	50343.	5252.6
#3	2375.4	5711.5	50466.	5278.3

Zoom In Zoom Out

Sample Name: MP30368-D1 Acquired: 5/19/2016 11:07:07 Type: Unk
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 4.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0024	4.520	.0165	.0176	.0010	389.9	.0129	.0403	.0170
Stddev	.0010	.016	.0012	.0004	.0002	1.3	.0002	.0002	.0008
%RSD	39.51	.3471	7.122	2.379	19.98	.3280	1.603	.5271	4.531
#1	.0029	4.527	.0154	.0179	.0008	391.4	.0127	.0401	.0171
#2	.0013	4.532	.0163	.0176	.0012	389.1	.0131	.0405	.0177
#3	.0031	4.503	.0177	.0171	.0009	389.3	.0129	.0404	.0161

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0060	2.980	9.017	520.4	F28.02	-.0015	107.2	.3067	.0020
Stddev	.0011	.008	.076	.9	.01	.0002	.3	.0009	.0010
%RSD	18.03	.2643	.8457	.1765	.0537	14.21	.2992	.2993	49.21
#1	.0072	2.972	9.078	521.4	28.00	-.0017	107.5	.3059	.0030
#2	.0057	2.987	8.931	519.7	28.03	-.0013	107.1	.3065	.0011
#3	.0051	2.980	9.041	520.1	28.01	-.0014	106.9	.3077	.0019

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0030	.0154	31.56	-.0013	.1775	.0884	.0093	.0442	.0854
Stddev	.0036	.0023	.14	.0006	.0015	.0011	.0058	.0015	.0002
%RSD	118.6	14.64	.4535	47.99	.8634	1.212	62.30	3.284	.2707
#1	.0011	.0131	31.46	-.0020	.1791	.0873	.0154	.0438	.0855
#2	-.0050	.0176	31.50	-.0009	.1772	.0894	.0039	.0458	.0856
#3	-.0052	.0155	31.72	-.0010	.1760	.0884	.0085	.0429	.0851

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2383.3	5718.9	50825.	5266.8
Stddev	4.4	15.4	115.	29.2
%RSD	.18303	.27013	.22707	.55413
#1	2388.4	5734.2	50887.	5244.8
#2	2381.0	5719.3	50692.	5299.9
#3	2380.7	5703.3	50896.	5255.8

Zoom In Zoom Out

Sample Name: MP30368-S1 Acquired: 5/19/2016 11:11:21 Type: Unk
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 4.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0545	32.55	2.155	2.207	.0544	392.7	.0657	.5641	.2261
Stddev	.0016	.19	.008	.013	.0002	1.3	.0003	.0019	.0002
%RSD	2.866	.5851	.3749	.6090	.2991	.3207	.3889	.3360	.1000
#1	.0563	32.51	2.147	2.206	.0542	391.8	.0655	.5619	.2263
#2	.0534	32.76	2.154	2.221	.0545	394.2	.0656	.5650	.2263
#3	.0539	32.38	2.163	2.194	.0545	392.1	.0660	.5653	.2259

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2742	29.35	35.20	520.1	F27.35	.5023	127.1	.8270	.5101
Stddev	.0009	.17	.15	1.8	.30	.0018	.5	.0007	.0024
%RSD	.3392	.5873	.4233	.3503	1.104	.3608	.3746	.0861	.4710
#1	.2746	29.24	35.19	518.7	27.70	.5005	126.9	.8265	.5073
#2	.2749	29.54	35.35	522.2	27.19	.5022	127.6	.8266	.5111
#3	.2731	29.25	35.05	519.5	27.16	.5042	126.7	.8278	.5118

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5325	2.178	30.51	.5250	.6776	.5802	2.062	.5411	.6133
Stddev	.0040	.004	.09	.0017	.0042	.0053	.008	.0037	.0010
%RSD	.7566	.1885	.3102	.3296	.6137	.9116	.3917	.6754	.1612
#1	.5303	2.175	30.44	.5249	.6769	.5863	2.053	.5451	.6123
#2	.5301	2.177	30.48	.5233	.6821	.5780	2.065	.5401	.6142
#3	.5372	2.183	30.62	.5268	.6739	.5764	2.069	.5380	.6133

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2321.1	5588.9	50080.	5204.1
Stddev	3.6	9.4	385.	3.8
%RSD	.15655	.16802	.76910	.07301
#1	2324.2	5599.2	49646.	5206.3
#2	2322.1	5586.7	50217.	5206.3
#3	2317.1	5580.8	50379.	5199.7

Zoom In Zoom Out

Sample Name: MP30368-S2 Acquired: 5/19/2016 11:15:27 Type: Unk
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 4.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0539	32.56	2.157	2.198	.0549	396.4	.0660	.5682	.2306
Stddev	.0002	.18	.011	.010	.0005	1.5	.0001	.0019	.0008
%RSD	.3634	.5540	.5269	.4602	.9893	.3896	.1448	.3300	.3536
#1	.0538	32.76	2.146	2.209	.0555	398.0	.0661	.5661	.2313
#2	.0542	32.43	2.157	2.189	.0544	394.9	.0661	.5697	.2297
#3	.0538	32.49	2.169	2.196	.0548	396.4	.0659	.5689	.2309

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2757	29.46	35.25	524.8	F27.67	.5038	128.4	.8322	.5160
Stddev	.0005	.10	.12	2.0	.09	.0014	.6	.0022	.0018
%RSD	.1942	.3419	.3288	.3823	.3097	.2853	.4903	.2689	.3515
#1	.2761	29.57	35.28	527.1	27.57	.5024	129.0	.8306	.5147
#2	.2751	29.37	35.12	523.5	27.71	.5053	127.7	.8313	.5180
#3	.2759	29.45	35.34	523.8	27.72	.5036	128.3	.8348	.5152

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5351	2.185	30.67	.5255	.6796	.5754	2.080	.5447	.6180
Stddev	.0016	.004	.06	.0039	.0021	.0032	.005	.0008	.0008
%RSD	.2975	.2042	.1962	.7475	.3033	.5551	.2261	.1470	.1353
#1	.5334	2.180	30.61	.5250	.6818	.5786	2.080	.5446	.6170
#2	.5353	2.187	30.67	.5219	.6777	.5722	2.084	.5455	.6185
#3	.5366	2.189	30.73	.5297	.6793	.5754	2.075	.5440	.6185

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2342.1	5660.0	50690.	5297.5
Stddev	2.4	8.4	12.	25.0
%RSD	.10161	.14797	.02423	.47211
#1	2343.2	5669.7	50691.	5282.7
#2	2339.3	5654.7	50678.	5283.5
#3	2343.7	5655.7	50703.	5326.4

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: MP30368-PS1 Acquired: 5/19/2016 11:19:33 Type: Unk
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 4.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0506	7.221	.1244	.2962	.0535	389.5	.0665	.0930	.0711
Stddev	.0009	.022	.0025	.0013	.0004	.8	.0001	.0001	.0018
%RSD	1.773	.3067	2.000	.4403	.7997	.2110	.1405	.0778	2.480
#1	.0506	7.205	.1244	.2970	.0538	389.9	.0666	.0929	.0691
#2	.0496	7.247	.1269	.2970	.0538	390.1	.0664	.0929	.0717
#3	.0514	7.212	.1220	.2947	.0530	388.6	.0664	.0930	.0725

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.1145	6.034	19.45	521.6	F28.33	.0999	116.5	.4161	.0531
Stddev	.0007	.027	.05	.5	.11	.0004	.3	.0024	.0012
%RSD	.5749	.4444	.2686	.1040	.3743	.4147	.2284	.5675	2.236
#1	.1147	6.022	19.39	521.2	28.45	.1004	116.6	.4156	.0523
#2	.1150	6.015	19.49	522.2	28.26	.0996	116.7	.4141	.0526
#3	.1137	6.065	19.46	521.3	28.28	.0998	116.2	.4187	.0545

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.1060	.1198	32.24	.0489	.2261	.1939	.1106	.0955	.3468
Stddev	.0026	.0030	.10	.0005	.0005	.0019	.0036	.0003	.0006
%RSD	2.496	2.538	.3054	1.092	.2388	.9907	3.295	.3045	.1595
#1	.1080	.1164	32.13	.0491	.2267	.1935	.1082	.0953	.3474
#2	.1069	.1206	32.32	.0493	.2257	.1960	.1088	.0958	.3464
#3	.1030	.1223	32.27	.0483	.2258	.1922	.1148	.0953	.3465

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2374.1	5670.0	50679.	5319.5
Stddev	8.4	2.3	154.	15.9
%RSD	.35423	.04042	.30432	.29799
#1	2364.8	5672.5	50504.	5322.4
#2	2381.1	5668.1	50742.	5302.4
#3	2376.5	5669.3	50793.	5333.8

Zoom In Zoom Out

Sample Name: MP30368-SD1 Acquired: 5/19/2016 11:23:45 Type: Unk
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 20.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0085	4.344	.0139	.0154	-.0003	364.5	.0115	.0368	.0186	.0068
Stddev	.0043	.079	.0184	.0029	.0011	1.3	.0008	.0010	.0012	.0018
%RSD	51.23	1.821	132.6	19.05	338.6	.3620	7.021	2.645	6.466	26.03
#1	.0086	4.379	.0088	.0140	.0009	366.0	.0115	.0359	.0178	.0066
#2	.0128	4.253	.0344	.0187	-.0006	364.0	.0108	.0378	.0200	.0086
#3	.0041	4.399	-.0015	.0133	-.0012	363.5	.0124	.0367	.0180	.0051

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	2.779	8.215	488.2	28.01	-.0086	98.89	.3010	-.0016	-.0484	-.0080
Stddev	.024	.159	1.8	.02	.0002	.23	.0019	.0064	.0158	.0206
%RSD	.8461	1.933	.3592	.0706	2.826	.2291	.6277	398.7	32.66	256.7
#1	2.756	8.325	490.1	27.99	-.0084	99.14	.2992	.0040	-.0654	-.0087
#2	2.803	8.033	487.9	28.03	-.0085	98.85	.3030	-.0002	-.0454	.0129
#3	2.779	8.286	486.6	28.01	-.0088	98.69	.3008	-.0086	-.0343	-.0283

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	30.04	-.0062	.1661	.0923	.0234	.0430	.1738
Stddev	.02	.0028	.0029	.0036	.0086	.0004	.0008
%RSD	.0776	45.33	1.727	3.935	36.90	1.001	.4385
#1	30.04	-.0077	.1693	.0952	.0203	.0426	.1746
#2	30.02	-.0080	.1652	.0936	.0168	.0434	.1732
#3	30.07	-.0030	.1638	.0882	.0332	.0429	.1735

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2606.3	5953.3	53826.	5406.7
Stddev	3.3	10.3	141.	23.2
%RSD	.12616	.17335	.26195	.42843
#1	2607.9	5964.7	53946.	5379.9
#2	2608.5	5944.6	53671.	5419.4
#3	2602.5	5950.6	53862.	5420.7

Zoom In Zoom Out

Sample Name: FA33957-11 Acquired: 5/19/2016 11:27:51 Type: Unk
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0177	136.4	.2972	.0028	.0181	730.2	1.796	.2496	.2105
Stddev	.0003	.3	.0008	.0001	.0002	14.4	.002	.0002	.0015
%RSD	1.846	.2179	.2751	4.842	1.133	1.971	.1331	.0938	.7183
#1	.0179	136.6	.2964	.0027	.0182	719.1	1.794	.2496	.2099
#2	.0173	136.5	.2980	.0029	.0178	746.5	1.795	.2493	.2094
#3	.0178	136.1	.2972	.0029	.0181	725.1	1.799	.2498	.2122

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0258	73.09	118.7	406.0	F14.74	.0191	F337.0	3.209	.0069
Stddev	.0002	.18	.3	1.0	.07	.0004	2.3	.003	.0018
%RSD	.9567	.2479	.2555	.2484	.5069	1.965	.6971	.1039	26.47
#1	.0261	73.17	118.9	406.2	14.70	.0187	336.2	3.206	.0052
#2	.0256	73.22	118.7	406.9	14.69	.0190	335.2	3.209	.0088
#3	.0258	72.89	118.3	404.9	14.82	.0195	339.7	3.213	.0066

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0015	.0073	40.77	-.0011	.8307	.0036	-.0035	2.250	F18.83
Stddev	.0036	.0009	.05	.0003	.0019	.0003	.0017	.007	.02
%RSD	244.2	11.75	.1123	30.36	.2271	9.636	47.99	.3056	.1261
#1	.0013	.0063	40.76	-.0010	.8328	.0032	-.0016	2.253	18.81
#2	.0051	.0075	40.74	-.0014	.8303	.0039	-.0039	2.242	18.83
#3	-.0020	.0080	40.82	-.0008	.8291	.0037	-.0048	2.255	18.85

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2118.3	5607.5	49049.	5332.0
Stddev	1.5	5.0	225.	13.2
%RSD	.07140	.08841	.45810	.24672
#1	2117.3	5609.2	49091.	5345.1
#2	2117.6	5611.4	49250.	5318.7
#3	2120.1	5601.9	48807.	5332.2

Zoom In Zoom Out

Sample Name: FA33957-14 Acquired: 5/19/2016 11:32:17 Type: Unk
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0258	135.3	.1271	.0822	.0160	661.6	1.056	.0679	.9098
Stddev	.0005	.3	.0020	.0004	.0003	9.8	.002	.0001	.0011
%RSD	1.798	.2393	1.535	.5341	1.568	1.481	.1556	.0859	.1254
#1	.0253	135.7	.1258	.0819	.0161	672.7	1.055	.0678	.9100
#2	.0261	135.0	.1293	.0820	.0157	654.3	1.058	.0679	.9108
#3	.0260	135.2	.1261	.0827	.0161	657.8	1.055	.0680	.9086

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.5685	18.28	106.8	145.4	4.787	.0459	F245.5	1.637	.0015
Stddev	.0023	.05	.3	.3	.035	.0004	1.4	.002	.0011
%RSD	.4017	.2827	.2533	.1832	.7342	.8366	.5788	.1371	70.85
#1	.5706	18.30	107.0	145.4	4.811	.0456	244.2	1.634	.0014
#2	.5661	18.23	106.5	145.1	4.747	.0457	247.0	1.639	.0005
#3	.5688	18.33	106.9	145.6	4.804	.0464	245.2	1.637	.0026

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0125	.0265	43.20	-.0012	1.587	.1044	-.0137	3.374	F11.34
Stddev	.0010	.0011	.02	.0005	.003	.0001	.0017	.003	.01
%RSD	7.941	3.974	.0551	40.54	.2117	.0978	12.36	.1019	.0964
#1	.0136	.0277	43.17	-.0015	1.590	.1045	-.0149	3.378	11.33
#2	.0122	.0260	43.22	-.0006	1.583	.1043	-.0118	3.372	11.35
#3	.0117	.0258	43.21	-.0013	1.588	.1044	-.0146	3.373	11.34

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2192.8	5766.0	51426.	5471.2
Stddev	.8	8.9	35.	21.9
%RSD	.03534	.15385	.06856	.40088
#1	2193.7	5775.6	51393.	5456.9
#2	2192.3	5758.1	51463.	5496.4
#3	2192.4	5764.3	51421.	5460.3

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: FA33957-20 Acquired: 5/19/2016 11:36:38 Type: Unk
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0029	2.769	1.081	.0040	.0010	242.1	.2292	.2921	.0412
Stddev	.0003	.033	.003	.0003	.0001	.1	.0002	.0004	.0003
%RSD	10.45	1.183	.2541	7.301	9.198	.0553	.1034	.1489	.8196
#1	.0030	2.732	1.079	.0042	.0010	242.3	.2289	.2919	.0409
#2	.0025	2.777	1.084	.0037	.0010	242.1	.2293	.2917	.0416
#3	.0031	2.796	1.080	.0041	.0009	242.1	.2293	.2926	.0411

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.1096	56.74	54.01	696.2	4.658	.0074	F239.0	4.830	.0066
Stddev	.0002	.11	.13	.9	.014	.0002	1.5	.004	.0003
%RSD	.2162	.2020	.2397	.1235	.2984	3.142	.6216	.0750	5.146
#1	.1094	56.64	54.15	697.2	4.650	.0074	238.2	4.826	.0066
#2	.1095	56.72	53.89	695.8	4.674	.0072	238.0	4.832	.0069
#3	.1099	56.87	53.99	695.7	4.651	.0076	240.7	4.833	.0062

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0056	.0008	45.72	-.0012	.4128	.0065	.0041	.2324	6.590
Stddev	.0009	.0009	.01	.0002	.0005	.0001	.0018	.0004	.008
%RSD	16.51	115.8	.0297	16.40	.1103	1.913	42.99	.1660	.1264
#1	-.0066	.0001	45.72	-.0011	.4131	.0067	.0026	.2327	6.581
#2	-.0048	.0004	45.70	-.0014	.4123	.0065	.0038	.2324	6.595
#3	-.0054	.0018	45.73	-.0010	.4130	.0064	.0061	.2320	6.596

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2191.5	5464.7	49423.	5267.5
Stddev	2.4	1.0	193.	18.4
%RSD	.10904	.01825	.39031	.34983
#1	2189.1	5464.5	49558.	5250.8
#2	2191.5	5463.8	49202.	5264.3
#3	2193.9	5465.8	49510.	5287.3

Zoom In Zoom Out

Sample Name: FA33957-22 Acquired: 5/19/2016 11:40:48 Type: Unk
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0059	250.8	.0771	.0279	.0080	565.4	.5453	.1763	.0940
Stddev	.0003	.5	.0011	.0004	.0000	4.5	.0003	.0002	.0005
%RSD	5.714	.1839	1.369	1.611	.0741	.7963	.0550	.1344	.5174
#1	.0057	251.1	.0780	.0275	.0080	567.2	.5451	.1760	.0944
#2	.0063	250.3	.0774	.0280	.0080	560.3	.5452	.1764	.0942
#3	.0058	251.1	.0760	.0284	.0080	568.8	.5456	.1765	.0934

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0324	224.2	156.3	220.8	7.155	.0175	F223.9	.8880	.0180
Stddev	.0003	.3	.2	.3	.013	.0004	2.9	.0006	.0007
%RSD	.8153	.1144	.1486	.1549	.1755	2.270	1.307	.0685	4.163
#1	.0325	224.5	156.3	220.6	7.166	.0178	222.1	.8878	.0172
#2	.0321	224.0	156.0	220.6	7.141	.0171	222.3	.8875	.0181
#3	.0325	224.1	156.5	221.2	7.157	.0177	227.2	.8887	.0187

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0000	.0022	38.96	-.0004	1.933	.0105	.0073	.6762	4.248
Stddev	.0006	.0029	.07	.0002	.002	.0002	.0024	.0005	.002
%RSD	1805.	130.9	.1812	42.81	.1170	1.692	33.39	.0756	.0549
#1	.0004	-.0004	38.93	-.0006	1.933	.0104	.0100	.6766	4.245
#2	-.0007	.0054	38.90	-.0004	1.930	.0103	.0052	.6756	4.248
#3	.0004	.0017	39.04	-.0002	1.934	.0107	.0068	.6765	4.250

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2207.4	5607.0	50054.	5384.5
Stddev	1.8	8.1	85.	17.8
%RSD	.08092	.14378	.16947	.32981
#1	2207.8	5615.9	50032.	5404.2
#2	2205.4	5604.8	50148.	5379.8
#3	2208.9	5600.3	49982.	5369.6

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/19/2016 11:45:15 Type: QC
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2521	39.89	2.071	2.054	2.018	39.97	2.057	2.057	1.977	2.007
Stddev	.0006	.18	.002	.006	.008	.19	.000	.002	.001	.002
%RSD	.2555	.4389	.1152	.2709	.4008	.4787	.0203	.0758	.0285	.1133
#1	.2525	40.08	2.069	2.059	2.026	40.19	2.057	2.055	1.978	2.006
#2	.2524	39.75	2.074	2.048	2.010	39.83	2.058	2.058	1.977	2.009
#3	.2513	39.83	2.071	2.055	2.019	39.89	2.057	2.058	1.977	2.005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.29	40.35	40.45	2.043	2.062	39.69	2.082	1.996	2.051	2.067
Stddev	.17	.16	.16	.002	.004	.16	.001	.003	.002	.002
%RSD	.4079	.3864	.3968	.0789	.2020	.3937	.0339	.1327	.1139	.0879
#1	41.48	40.53	40.63	2.042	2.057	39.86	2.081	1.997	2.050	2.068
#2	41.15	40.25	40.41	2.044	2.062	39.56	2.083	1.998	2.053	2.068
#3	41.24	40.29	40.32	2.041	2.065	39.65	2.082	1.993	2.049	2.065
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.148	2.119	2.028	2.031	2.021	2.036	2.053
Stddev	.004	.002	.007	.002	.004	.000	.001
%RSD	.2023	.0905	.3694	.1143	.2151	.0182	.0230
#1	2.147	2.117	2.035	2.028	2.018	2.036	2.053
#2	2.152	2.120	2.020	2.033	2.026	2.036	2.053
#3	2.144	2.121	2.028	2.031	2.019	2.035	2.054
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/19/2016 11:45:15 Type: QC
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2314.2	5681.0	52177.	5387.9
Stddev	.4	3.2	22.	47.4
%RSD	.01539	.05566	.04227	.87991
#1	2314.6	5684.4	52152.	5339.5
#2	2314.0	5680.4	52193.	5389.9
#3	2313.9	5678.2	52185.	5434.3

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/19/2016 11:49:12 Type: QC
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	.0072	.0007	.0004	.0005	.0200	.0002	.0000	.0002
Stddev	.0003	.0111	.0006	.0001	.0001	.0018	.0001	.0001	.0001
%RSD	48.78	154.0	78.92	16.12	15.82	9.048	32.05	811.1	74.25
#1	.0008	.0148	.0011	.0005	.0004	.0219	.0002	.0001	.0001
#2	.0003	-.0055	.0011	.0004	.0005	.0199	.0001	.0000	.0004
#3	.0007	.0122	.0001	.0003	.0005	.0182	.0002	.0000	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0463	.0383	.0245	.0004	F.0020	.0535	.0003	-.0009
Stddev	.0002	.0118	.0030	.0125	.0001	.0006	.0104	.0001	.0001
%RSD	48.55	25.49	7.922	51.23	14.69	29.04	19.42	40.28	9.429
#1	.0006	.0588	.0366	.0388	.0005	.0026	.0561	.0004	-.0009
#2	.0003	.0449	.0366	.0156	.0004	.0017	.0421	.0002	-.0010
#3	.0003	.0353	.0418	.0190	.0004	.0015	.0624	.0003	-.0010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0005	.0007	.0050	.0005	.0005	.0016	.0008	.0002	.0000
Stddev	.0002	.0004	.0002	.0002	.0000	.0003	.0005	.0001	.0001
%RSD	46.71	65.77	3.800	41.59	8.434	17.97	63.88	41.68	139.2
#1	-.0008	.0011	.0050	.0007	.0006	.0018	.0011	.0001	.0001
#2	-.0005	.0002	.0048	.0004	.0005	.0016	.0011	.0003	.0001
#3	-.0003	.0006	.0051	.0003	.0005	.0012	.0002	.0002	.0000
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/19/2016 11:49:12 Type: QC
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2670.5	5881.6	54324.	5371.1
Stddev	2.4	5.2	89.	43.2
%RSD	.09105	.08875	.16314	.80386
#1	2670.9	5883.5	54245.	5323.8
#2	2672.7	5885.6	54307.	5381.2
#3	2667.9	5875.7	54420.	5408.4

Zoom In Zoom Out

Sample Name: MP30372-MB1 Acquired: 5/19/2016 11:53:22 Type: QC
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0031	.0000	.0001	.0001	.0390	.0001	-.0001	.0002	.0003
Stddev	.0002	.0048	.0002	.0001	.0001	.0012	.0000	.0001	.0002	.0001
%RSD	120.4	156.1	1814.	126.6	177.3	3.094	48.14	66.33	103.4	39.85
#1	.0000	-.0019	-.0002	.0001	.0002	.0403	.0000	-.0002	.0001	.0002
#2	.0004	.0034	.0003	.0000	.0000	.0388	.0000	-.0001	.0001	.0005
#3	.0002	.0078	-.0001	.0001	.0000	.0379	.0001	.0000	.0005	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0036	.0373	-.0129	.0001	.0004	.0286	.0002	.0002	-.0016	.0004
Stddev	.0006	.0282	.0115	.0000	.0001	.0042	.0001	.0004	.0002	.0020
%RSD	16.22	75.63	89.20	41.50	27.85	14.59	56.52	213.8	14.18	474.1
#1	.0042	.0485	-.0193	.0001	.0005	.0241	.0003	-.0002	-.0018	-.0017
#2	.0031	.0052	-.0199	.0001	.0003	.0323	.0002	.0007	-.0013	.0008
#3	.0034	.0582	.0004	.0001	.0003	.0294	.0001	.0001	-.0017	.0022
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0136	.0000	.0001	.0001	-.0003	-.0001	.0000
Stddev	.0001	.0001	.0000	.0001	.0004	.0001	.0000
%RSD	.8906	2113.	24.29	61.07	106.6	84.97	111.3
#1	.0135	.0000	.0002	.0002	.0000	-.0001	.0000
#2	.0136	.0000	.0001	.0001	-.0007	-.0001	.0000
#3	.0138	-.0001	.0001	.0001	-.0004	-.0002	.0000
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP30372-MB1 Acquired: 5/19/2016 11:53:22 Type: QC
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2699.1	5959.7	55499.	5464.2
Stddev	4.0	5.5	131.	27.6
%RSD	.14827	.09184	.23675	.50499
#1	2695.6	5964.4	55367.	5432.9
#2	2698.3	5961.2	55499.	5474.3
#3	2703.5	5953.7	55630.	5485.2

Zoom In Zoom Out

Sample Name: MP30372-B1 Acquired: 5/19/2016 11:57:36 Type: QC
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0491	26.91	2.044	2.129	.0526	25.55	.0521	.5205	.2039	.2585
Stddev	.0002	.14	.000	.008	.0001	.10	.0001	.0010	.0009	.0007
%RSD	.5079	.5093	.0217	.3616	.1508	.4093	.2344	.1893	.4287	.2771
#1	.0490	26.97	2.044	2.137	.0527	25.65	.0522	.5216	.2048	.2580
#2	.0489	26.75	2.044	2.124	.0526	25.44	.0522	.5196	.2038	.2583
#3	.0493	27.01	2.044	2.124	.0525	25.57	.0520	.5203	.2031	.2593

Check ? Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.89	25.48	25.37	.5261	.4930	25.29	.5309	.4936	.5124	2.048
Stddev	.08	.12	.16	.0012	.0002	.10	.0006	.0017	.0022	.001
%RSD	.3161	.4779	.6261	.2311	.0362	.3849	.1099	.3345	.4201	.0522
#1	25.94	25.62	25.41	.5275	.4931	25.34	.5316	.4921	.5133	2.048
#2	25.80	25.39	25.20	.5257	.4928	25.17	.5305	.4954	.5140	2.049
#3	25.94	25.42	25.51	.5252	.4931	25.34	.5307	.4932	.5100	2.047

Check ? Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0201	.5203	.4928	.4921	2.000	.4832	.5172
Stddev	.0003	.0012	.0011	.0002	.003	.0006	.0004
%RSD	1.413	.2211	.2330	.0387	.1502	.1328	.0821
#1	.0199	.5215	.4937	.4919	1.997	.4839	.5176
#2	.0200	.5200	.4915	.4923	2.003	.4827	.5174
#3	.0205	.5193	.4930	.4920	2.000	.4829	.5168

Check ? None Chk Pass None None Chk PassChk PassChk Pass
Value
Range

Zoom In Zoom Out

Sample Name: MP30372-B1 Acquired: 5/19/2016 11:57:36 Type: QC
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2443.2	5794.5	52721.	5343.9
Stddev	2.8	9.9	261.	54.1
%RSD	.11285	.17087	.49495	1.0125
#1	2445.6	5784.2	52450.	5286.0
#2	2443.7	5803.9	52744.	5393.1
#3	2440.2	5795.4	52970.	5352.7

Zoom In Zoom Out

Sample Name: FA34039-1 Acquired: 5/19/2016 12:01:33 Type: Unk
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0005	1.868	.0003	.0472	.0001	11.34	.0000	.0008	.0023	.0137
Stddev	.0001	.018	.0002	.0003	.0000	.10	.0000	.0000	.0004	.0002
%RSD	20.47	.9417	83.06	.6016	27.56	.9051	376.9	3.668	17.71	1.371
#1	.0004	1.887	.0000	.0475	.0001	11.44	.0000	.0008	.0019	.0137
#2	.0004	1.854	.0004	.0469	.0002	11.35	.0000	.0008	.0025	.0135
#3	.0006	1.861	.0003	.0472	.0001	11.24	.0000	.0008	.0026	.0139

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	1.858	2.253	2.247	.1284	.0004	7.079	.0010	.0008	-.0013	.0012
Stddev	.025	.012	.007	.0004	.0000	.063	.0001	.0005	.0008	.0009
%RSD	1.327	.5233	.2979	.2784	10.38	.8925	14.56	62.38	61.15	76.36
#1	1.884	2.266	2.239	.1281	.0004	7.146	.0009	.0002	-.0017	.0007
#2	1.854	2.249	2.251	.1284	.0004	7.072	.0008	.0009	-.0004	.0023
#3	1.835	2.243	2.251	.1288	.0005	7.020	.0011	.0011	-.0017	.0007

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.672	.0001	.0505	.0732	.0011	.0039	.0118
Stddev	.025	.0002	.0003	.0005	.0002	.0002	.0000
%RSD	.4487	174.5	.6119	.6381	22.26	6.193	.3187
#1	5.667	.0001	.0509	.0728	.0008	.0039	.0119
#2	5.700	-.0001	.0504	.0731	.0012	.0037	.0118
#3	5.650	.0003	.0504	.0737	.0013	.0042	.0119

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2611.3	5926.5	54393.	5469.7
Stddev	8.8	12.5	188.	101.7
%RSD	.33671	.21029	.34580	1.8588
#1	2602.1	5918.0	54434.	5382.2
#2	2619.6	5920.7	54558.	5445.6
#3	2612.3	5940.8	54189.	5581.2

Zoom In Zoom Out

Sample Name: MP30372-D1 Acquired: 5/19/2016 12:05:41 Type: Unk
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0004	1.953	.0000	.0464	.0000	11.25	.0000	.0008	.0023	.0014
Stddev	.0001	.055	.0005	.0002	.0001	.03	.0000	.0000	.0001	.0003
%RSD	25.87	2.823	985.2	.3273	194.5	.3064	10460.	3.872	5.743	20.62
#1	.0003	1.889	.0000	.0466	.0001	11.25	.0000	.0008	.0022	.0012
#2	.0004	1.982	.0005	.0464	-.0001	11.21	.0000	.0008	.0024	.0017
#3	.0005	1.987	-.0004	.0463	.0001	11.28	.0000	.0008	.0024	.0012

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	1.798	2.224	2.227	.1260	.0001	6.995	.0010	.0002	-.0019	.0019
Stddev	.013	.003	.005	.0001	.0000	.004	.0001	.0004	.0008	.0009
%RSD	.6992	.1483	.2462	.0770	18.92	.0523	14.76	174.3	43.99	50.28
#1	1.784	2.228	2.223	.1259	.0001	6.997	.0011	-.0001	-.0019	.0026
#2	1.807	2.223	2.233	.1259	.0001	6.991	.0011	.0007	-.0028	.0008
#3	1.804	2.221	2.224	.1261	.0001	6.996	.0008	.0001	-.0011	.0022

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.609	.0000	.0499	.0719	-.0004	.0039	.0064
Stddev	.032	.0001	.0000	.0063	.0007	.0001	.0000
%RSD	.5670	24970.	.0857	8.798	157.3	2.443	.1917
#1	5.646	-.0001	.0500	.0657	.0000	.0039	.0064
#2	5.590	.0000	.0499	.0716	-.0001	.0040	.0064
#3	5.592	.0000	.0499	.0783	-.0012	.0039	.0064

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2622.4	5966.0	54382.	5417.0
Stddev	2.1	4.5	145.	67.5
%RSD	.07926	.07465	.26693	1.2467
#1	2623.8	5970.2	54549.	5461.9
#2	2620.0	5961.4	54311.	5449.7
#3	2623.4	5966.5	54285.	5339.3

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: MP30372-SD1 Acquired: 5/19/2016 12:09:49 Type: Unk
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0027	2.005	.0021	.0486	.0000	11.91	.0000	.0007	.0016	.0317
Stddev	.0028	.097	.0018	.0004	.0002	.04	.000	.0002	.0009	.0006
%RSD	101.1	4.819	87.43	.7834	440.9	.3022	634.8	31.12	55.58	1.783
#1	.0003	1.967	.0041	.0484	-.0002	11.95	.0001	.0006	.0008	.0320
#2	.0021	1.934	.0005	.0484	.0001	11.88	.0000	.0010	.0016	.0311
#3	.0058	2.115	.0016	.0491	.0002	11.92	-.0001	.0006	.0026	.0321

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	1.876	2.398	2.353	.1348	-.0012	7.545	.0009	-.0018	-.0095	-.0027
Stddev	.020	.087	.032	.0006	.0002	.048	.0004	.0039	.0026	.0023
%RSD	1.077	3.637	1.377	.4085	18.62	.6371	47.62	212.7	27.40	83.34
#1	1.897	2.329	2.321	.1347	-.0012	7.565	.0005	.0023	-.0125	-.0027
#2	1.857	2.369	2.353	.1354	-.0013	7.490	.0008	-.0054	-.0080	-.0005
#3	1.875	2.496	2.386	.1343	-.0009	7.580	.0014	-.0024	-.0080	-.0050

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.910	-.0004	.0525	.0741	.0022	.0033	.0558
Stddev	.033	.0009	.0000	.0098	.0034	.0016	.0002
%RSD	.5573	221.5	.0765	13.21	151.7	47.71	.4357
#1	5.947	.0006	.0525	.0782	.0037	.0016	.0557
#2	5.901	-.0012	.0526	.0812	.0047	.0047	.0560
#3	5.883	-.0007	.0525	.0630	-.0016	.0035	.0556

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2690.4	6023.9	54590.	5435.6
Stddev	2.4	9.3	235.	30.5
%RSD	.08959	.15390	.42970	.56127
#1	2692.0	6033.6	54799.	5445.1
#2	2691.7	6022.9	54337.	5460.3
#3	2687.7	6015.2	54634.	5401.5

Zoom In Zoom Out

Sample Name: MP30372-PS1 Acquired: 5/19/2016 12:13:55 Type: Unk
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0480	4.525	.1093	.3279	.0544	16.69	.0544	.0558	.0565	.1228
Stddev	.0004	.007	.0005	.0020	.0001	.03	.0002	.0001	.0003	.0005
%RSD	.8936	.1627	.4479	.6100	.2485	.1830	.3043	.1343	.6128	.3715
#1	.0484	4.532	.1096	.3296	.0544	16.69	.0543	.0558	.0566	.1229
#2	.0476	4.527	.1087	.3284	.0546	16.65	.0546	.0559	.0567	.1232
#3	.0479	4.517	.1094	.3257	.0543	16.71	.0545	.0557	.0561	.1223

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	4.963	12.69	7.572	.1805	.1039	17.59	.1108	.0521	.1102	.1044
Stddev	.009	.05	.023	.0008	.0001	.04	.0002	.0008	.0009	.0001
%RSD	.1758	.4097	.3071	.4213	.1209	.2370	.1510	1.516	.7715	.0696
#1	4.962	12.75	7.565	.1813	.1038	17.64	.1106	.0523	.1092	.1043
#2	4.955	12.67	7.554	.1803	.1041	17.59	.1109	.0528	.1108	.1043
#3	4.972	12.66	7.598	.1798	.1039	17.55	.1107	.0512	.1106	.1044

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.578	.0521	.1012	.1784	.1029	.0551	.2888
Stddev	.016	.0004	.0003	.0038	.0006	.0002	.0008
%RSD	.2820	.6891	.3218	2.123	.6148	.3943	.2600
#1	5.588	.0519	.1015	.1806	.1022	.0553	.2879
#2	5.587	.0526	.1013	.1805	.1035	.0549	.2894
#3	5.560	.0519	.1009	.1740	.1029	.0552	.2891

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2532.9	5916.6	53636.	5413.3
Stddev	2.6	2.3	240.	30.5
%RSD	.10118	.03871	.44756	.56341
#1	2535.9	5919.2	53359.	5431.4
#2	2531.2	5915.1	53782.	5430.4
#3	2531.6	5915.4	53767.	5378.1

Zoom In Zoom Out

Sample Name: MP30372-S1 Acquired: 5/19/2016 12:17:56 Type: Unk
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0497	28.96	2.049	2.182	.0533	36.99	.0522	.5217	.2096	.2638
Stddev	.0002	.09	.002	.009	.0001	.18	.0002	.0008	.0003	.0003
%RSD	.4112	.3076	.0860	.4051	.2533	.4977	.3615	.1444	.1451	.1157
#1	.0499	28.99	2.048	2.189	.0533	37.11	.0521	.5214	.2100	.2637
#2	.0495	29.03	2.048	2.185	.0534	37.08	.0521	.5211	.2095	.2635
#3	.0497	28.86	2.051	2.172	.0531	36.78	.0524	.5225	.2094	.2641

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	27.68	27.75	27.57	.6549	.4927	32.46	.5295	.5031	.5108	2.050
Stddev	.06	.09	.09	.0027	.0005	.13	.0009	.0022	.0008	.000
%RSD	.2101	.3311	.3100	.4169	.1094	.3933	.1716	.4364	.1557	.0170
#1	27.74	27.81	27.65	.6572	.4924	32.58	.5290	.5020	.5099	2.050
#2	27.68	27.79	27.58	.6519	.4923	32.47	.5290	.5017	.5115	2.050
#3	27.62	27.64	27.48	.6557	.4933	32.33	.5306	.5056	.5110	2.050

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.468	.5145	.5476	.5650	2.028	.4899	.5232
Stddev	.012	.0010	.0015	.0116	.010	.0005	.0018
%RSD	.2174	.1949	.2805	2.056	.4751	.1082	.3362
#1	5.455	.5138	.5491	.5580	2.026	.4906	.5226
#2	5.474	.5140	.5477	.5587	2.020	.4896	.5219
#3	5.476	.5156	.5461	.5784	2.039	.4897	.5252

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2414.3	5831.5	52655.	5380.9
Stddev	7.4	4.0	307.	17.9
%RSD	.30643	.06928	.58327	.33193
#1	2414.4	5832.4	52389.	5371.2
#2	2421.6	5835.0	52991.	5370.0
#3	2406.8	5827.1	52583.	5401.5

Zoom In Zoom Out

Sample Name: MP30372-S2 Acquired: 5/19/2016 12:21:52 Type: Unk
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0491	28.94	2.016	2.189	.0535	37.06	.0515	.5147	.2084	.2609
Stddev	.0004	.12	.002	.009	.0002	.24	.0001	.0001	.0009	.0010
%RSD	.7300	.4294	.0846	.4200	.3980	.6518	.1389	.0106	.4515	.3783
#1	.0495	29.08	2.017	2.199	.0537	37.32	.0515	.5148	.2095	.2620
#2	.0489	28.90	2.017	2.188	.0534	37.01	.0516	.5147	.2079	.2608
#3	.0490	28.85	2.014	2.181	.0532	36.85	.0515	.5147	.2078	.2600

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	27.69	27.81	27.56	.6514	.4865	32.54	.5213	.4976	.5029	2.016
Stddev	.15	.15	.10	.0018	.0005	.16	.0012	.0013	.0011	.004
%RSD	.5547	.5331	.3752	.2717	.1021	.4877	.2274	.2568	.2258	.1793
#1	27.86	27.95	27.66	.6534	.4870	32.72	.5225	.4966	.5024	2.014
#2	27.64	27.83	27.55	.6503	.4863	32.49	.5212	.4971	.5042	2.020
#3	27.56	27.66	27.46	.6504	.4861	32.42	.5201	.4990	.5021	2.014

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.196	.5044	.5510	.5531	2.012	.4850	.5166
Stddev	.015	.0017	.0023	.0113	.002	.0014	.0003
%RSD	.2910	.3291	.4123	2.048	.0746	.2946	.0532
#1	5.208	.5060	.5533	.5651	2.011	.4865	.5167
#2	5.201	.5045	.5508	.5426	2.010	.4848	.5169
#3	5.179	.5027	.5488	.5514	2.013	.4837	.5164

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2409.5	5839.2	52154.	5319.2
Stddev	3.0	13.2	151.	64.3
%RSD	.12270	.22536	.29028	1.2080
#1	2408.9	5827.2	52276.	5260.1
#2	2406.9	5837.1	51985.	5309.8
#3	2412.7	5853.3	52202.	5387.6

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: FA34039-2 Acquired: 5/19/2016 12:25:48 Type: Unk
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0003	1.909	.0006	.0472	.0000	11.47	.0001	.0008	.0025	.0017
Stddev	.0000	.037	.0005	.0002	.0001	.04	.0000	.0001	.0002	.0001
%RSD	4.185	1.928	76.72	.3765	105.8	.3590	14.84	8.343	8.384	6.622
#1	.0002	1.934	.0005	.0474	.0000	11.52	.0001	.0007	.0023	.0017
#2	.0002	1.867	.0002	.0471	.0000	11.47	.0001	.0008	.0025	.0016
#3	.0003	1.926	.0011	.0470	.0001	11.44	.0001	.0007	.0027	.0018

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	1.858	2.283	2.272	.1330	.0005	7.611	.0010	.0013	-.0028	.0009
Stddev	.030	.043	.028	.0001	.0001	.034	.0001	.0002	.0006	.0005
%RSD	1.602	1.899	1.240	.1033	20.43	.4423	6.707	18.04	23.26	54.19
#1	1.881	2.292	2.269	.1330	.0005	7.650	.0011	.0015	-.0027	.0004
#2	1.824	2.322	2.246	.1331	.0004	7.591	.0010	.0011	-.0035	.0009
#3	1.869	2.236	2.302	.1328	.0005	7.592	.0010	.0013	-.0022	.0014

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.500	-.0002	.0506	.0851	.0007	.0041	.0160
Stddev	.025	.0002	.0001	.0088	.0006	.0001	.0001
%RSD	.4469	127.1	.2729	10.34	78.51	2.925	.5533
#1	5.527	-.0004	.0508	.0941	.0013	.0040	.0159
#2	5.492	.0000	.0505	.0765	.0001	.0040	.0160
#3	5.480	-.0001	.0506	.0848	.0008	.0042	.0159

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2612.6	5990.4	54050.	5347.3
Stddev	.7	5.7	185.	38.4
%RSD	.02678	.09487	.34188	.71858
#1	2611.8	5984.1	54131.	5303.1
#2	2613.0	5991.8	54181.	5366.1
#3	2613.0	5995.2	53839.	5372.7

Zoom In Zoom Out

Sample Name: FA34039-3 Acquired: 5/19/2016 12:29:53 Type: Unk
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	1.656	.0001	.0468	.0000	11.52	.0000	.0008	.0022	.0012
Stddev	.0004	.028	.0001	.0005	.000	.04	.0000	.0001	.0002	.0001
%RSD	429.0	1.663	58.18	1.069	572.8	.3211	154.0	8.046	7.314	7.158
#1	.0005	1.664	.0001	.0466	.0000	11.57	.0000	.0008	.0021	.0012
#2	-.0002	1.626	.0000	.0464	.0000	11.49	.0000	.0008	.0024	.0011
#3	.0000	1.679	.0002	.0474	.0000	11.51	.0000	.0009	.0022	.0012

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	1.731	2.227	2.249	.1362	.0001	7.565	.0008	.0004	-.0021	.0009
Stddev	.016	.017	.016	.0009	.0001	.013	.0001	.0004	.0007	.0009
%RSD	.9371	.7689	.7187	.6595	78.09	.1710	11.56	104.4	32.81	99.86
#1	1.747	2.246	2.267	.1373	.0002	7.570	.0008	.0005	-.0020	.0001
#2	1.715	2.223	2.236	.1357	.0000	7.550	.0007	.0008	-.0014	.0019
#3	1.732	2.212	2.244	.1357	.0001	7.575	.0008	.0000	-.0028	.0007

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.305	-.0002	.0510	.0699	-.0001	.0039	.0069
Stddev	.009	.0002	.0002	.0106	.0013	.0001	.0000
%RSD	.1606	101.3	.3046	15.11	1166.	2.416	.1702
#1	5.296	.0000	.0509	.0781	-.0014	.0038	.0069
#2	5.309	-.0003	.0508	.0735	.0011	.0040	.0069
#3	5.312	-.0004	.0511	.0580	-.0001	.0038	.0069

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2614.7	6006.5	53725.	5355.3
Stddev	6.4	10.1	58.	46.4
%RSD	.24609	.16744	.10717	.86673
#1	2609.3	5994.9	53666.	5302.5
#2	2613.0	6011.0	53728.	5389.6
#3	2621.8	6013.5	53781.	5373.9

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/19/2016 12:34:00 Type: QC
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2572	41.78	2.057	2.095	2.086	41.77	2.091	2.083	2.081	2.063
Stddev	.0007	.11	.002	.008	.006	.10	.005	.003	.007	.007
%RSD	.2778	.2595	.0955	.3865	.2867	.2313	.2285	.1508	.3197	.3312
#1	.2564	41.68	2.058	2.090	2.083	41.68	2.096	2.086	2.085	2.055
#2	.2578	41.89	2.055	2.105	2.092	41.87	2.090	2.084	2.073	2.065
#3	.2573	41.77	2.058	2.091	2.082	41.77	2.086	2.080	2.084	2.068
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	42.42	41.59	41.33	2.110	2.072	41.77	2.079	2.045	2.053	2.052
Stddev	.12	.14	.07	.002	.002	.14	.005	.006	.005	.002
%RSD	.2826	.3262	.1726	.0767	.1173	.3347	.2431	.3028	.2563	.1077
#1	42.29	41.52	41.26	2.112	2.070	41.68	2.084	2.051	2.047	2.054
#2	42.51	41.75	41.34	2.108	2.073	41.93	2.078	2.044	2.055	2.050
#3	42.47	41.50	41.40	2.110	2.074	41.70	2.074	2.039	2.057	2.052
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.141	2.086	2.104	2.104	2.068	2.074	2.077
Stddev	.002	.005	.006	.005	.005	.002	.008
%RSD	.1086	.2331	.2917	.2414	.2579	.1123	.3814
#1	2.143	2.090	2.101	2.103	2.064	2.072	2.086
#2	2.141	2.087	2.111	2.100	2.074	2.073	2.075
#3	2.139	2.080	2.099	2.110	2.066	2.077	2.070
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/19/2016 12:34:00 Type: QC
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2295.3	5710.2	50870.	5253.0
Stddev	5.9	9.8	125.	36.8
%RSD	.25565	.17093	.24483	.70068
#1	2288.6	5699.0	50769.	5291.5
#2	2298.3	5714.8	51010.	5249.5
#3	2299.1	5716.8	50833.	5218.1

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/19/2016 12:37:55 Type: QC
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	-.0065	.0013	.0000	.0001	.0044	.0002	.0002	.0003
Stddev	.0002	.0038	.0006	.000	.0001	.0018	.0000	.0000	.0001
%RSD	47.61	58.88	44.77	4666.	83.49	41.14	27.69	12.02	44.29
#1	.0001	-.0089	.0020	-.0002	.0000	.0048	.0002	.0002	.0004
#2	.0004	-.0086	.0010	.0001	.0002	.0024	.0002	.0002	.0004
#3	.0004	-.0021	.0010	.0000	.0002	.0060	.0001	.0002	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0317	.0297	.0023	.0002	F.0021	.0204	.0001	.0002
Stddev	.0002	.0083	.0167	.0190	.0000	.0005	.0065	.0001	.0003
%RSD	164.2	26.05	56.32	814.3	13.88	26.48	31.87	69.90	171.8
#1	.0000	.0412	.0356	.0051	.0002	.0026	.0183	.0002	-.0002
#2	.0003	.0266	.0108	.0198	.0002	.0020	.0277	.0001	.0002
#3	.0000	.0273	.0427	-.0179	.0002	.0015	.0152	.0000	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0001	.0048	.0004	.0002	F.0021	.0005	.0002	.0000
Stddev	.002	.0005	.0005	.0002	.0000	.0003	.0003	.0001	.0000
%RSD	3416.	409.6	10.82	61.04	17.87	13.59	64.29	73.96	141.9
#1	.0009	.0006	.0048	.0007	.0002	.0024	.0003	.0000	.0001
#2	.0008	-.0003	.0053	.0003	.0003	.0020	.0009	.0003	.0000
#3	-.0018	.0001	.0043	.0002	.0002	.0018	.0003	.0002	.0000
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0020			
Low Limit						-.0020			

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/19/2016 12:37:55 Type: QC
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2658.3	5987.3	53289.	5310.9
Stddev	.5	8.9	111.	45.2
%RSD	.01777	.14936	.20855	.85122
#1	2657.7	5978.4	53170.	5348.7
#2	2658.5	5987.1	53390.	5323.2
#3	2658.5	5996.3	53308.	5260.8

Zoom In Zoom Out

Sample Name: FA34015-2 Acquired: 5/19/2016 12:42:07 Type: Unk
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0003	.0606	.0014	.0199	.0001	87.65	.0010	.0003	.0042	.0102
Stddev	.0001	.0018	.0003	.0001	.0000	.43	.0000	.0001	.0002	.0002
%RSD	30.17	2.932	17.93	.6184	27.89	.4913	3.109	17.21	3.666	2.239
#1	.0003	.0622	.0012	.0200	.0001	88.10	.0011	.0003	.0042	.0099
#2	.0003	.0610	.0014	.0198	.0001	87.62	.0010	.0004	.0041	.0104
#3	.0002	.0587	.0017	.0198	.0001	87.24	.0010	.0004	.0044	.0102

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	3.033	1.886	5.426	.0228	.0010	20.45	.0111	.0000	-.0014	.0002
Stddev	.003	.027	.043	.0001	.0002	.09	.0000	.0004	.0004	.0009
%RSD	.1056	1.446	.7919	.2863	17.09	.4530	.3823	1775.	31.86	429.3
#1	3.037	1.909	5.467	.0228	.0011	20.55	.0110	.0003	-.0010	.0003
#2	3.030	1.893	5.429	.0227	.0010	20.44	.0111	.0001	-.0019	-.0008
#3	3.033	1.856	5.381	.0228	.0008	20.37	.0111	-.0004	-.0013	.0011

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	7.984	.0013	.2772	.0018	-.0007	.0082	.0017
Stddev	.005	.0000	.0009	.0001	.0002	.0001	.0000
%RSD	.0695	1.573	.3244	5.760	31.12	1.229	1.386
#1	7.988	.0013	.2781	.0019	-.0007	.0081	.0017
#2	7.977	.0013	.2772	.0018	-.0005	.0082	.0017
#3	7.986	.0013	.2763	.0017	-.0009	.0083	.0017

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2470.6	5843.0	51788.	5275.5
Stddev	2.6	12.0	234.	46.4
%RSD	.10389	.20506	.45131	.87956
#1	2468.7	5829.5	51768.	5230.6
#2	2469.6	5847.1	51566.	5272.8
#3	2473.5	5852.4	52032.	5323.3

Zoom In Zoom Out

Sample Name: FA34015-3 Acquired: 5/19/2016 12:46:15 Type: Unk
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.1961	.0031	.0314	.0001	88.33	.0019	.0007	.0056	.0581
Stddev	.0002	.0023	.0005	.0002	.0000	.13	.0000	.0001	.0002	.0002
%RSD	652.6	1.188	14.75	.5722	71.82	.1460	1.142	12.94	2.907	.2611
#1	-.0001	.1986	.0033	.0312	.0001	88.48	.0020	.0008	.0058	.0579
#2	.0002	.1955	.0035	.0315	.0000	88.28	.0019	.0006	.0056	.0580
#3	.0000	.1941	.0026	.0315	.0001	88.24	.0019	.0008	.0055	.0582

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	7.402	1.863	5.494	.0380	.0010	20.36	.1070	.0267	-.0018	-.0001
Stddev	.044	.024	.044	.0002	.0002	.03	.0001	.0002	.0006	.0010
%RSD	.5937	1.287	.7960	.6048	16.27	.1347	.1239	.8573	31.63	1552.
#1	7.448	1.872	5.544	.0382	.0012	20.37	.1069	.0269	-.0020	-.0005
#2	7.399	1.882	5.471	.0377	.0009	20.38	.1069	.0264	-.0022	-.0007
#3	7.360	1.836	5.466	.0379	.0009	20.33	.1071	.0266	-.0012	.0010

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	8.365	.0011	.2836	.0026	-.0005	.0130	.1122
Stddev	.006	.0001	.0005	.0000	.0006	.0004	.0001
%RSD	.0736	12.90	.1614	1.807	135.8	2.840	.0551
#1	8.360	.0011	.2835	.0026	.0002	.0134	.1122
#2	8.362	.0010	.2841	.0026	-.0006	.0127	.1122
#3	8.371	.0013	.2833	.0027	-.0010	.0129	.1123

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2474.5	5866.7	52153.	5266.5
Stddev	1.8	2.7	177.	19.9
%RSD	.07223	.04680	.33873	.37751
#1	2474.6	5869.9	51949.	5280.8
#2	2476.2	5865.5	52258.	5275.0
#3	2472.7	5864.8	52252.	5243.8

Zoom In Zoom Out

Sample Name: FA33992-1 Acquired: 5/19/2016 12:50:20 Type: Unk
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0002	.5706	.0007	.0099	.0000	1.882	.0000	-.0001	.0012	.0008
Stddev	.0003	.0138	.0005	.0001	.0000	.007	.0000	.0001	.0000	.0001
%RSD	148.3	2.425	71.83	1.247	441.9	.3597	108.9	72.09	2.927	18.36
#1	-.0005	.5784	.0014	.0100	.0000	1.882	.0000	.0000	.0011	.0007
#2	-.0001	.5546	.0005	.0097	.0000	1.875	.0001	-.0001	.0012	.0009
#3	.0000	.5787	.0004	.0099	.0000	1.888	.0001	-.0001	.0012	.0007

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0517	4.664	.9611	.0030	-.0001	2.907	.0001	-.0005	-.0014	.0004
Stddev	.0034	.022	.0182	.0000	.0000	.016	.0001	.0003	.0007	.0008
%RSD	6.489	.4790	1.897	1.572	72.60	.5553	152.4	75.25	49.16	194.0
#1	.0491	4.654	.9470	.0031	-.0001	2.926	.0002	-.0008	-.0015	-.0005
#2	.0505	4.648	.9546	.0030	.0000	2.897	.0000	-.0005	-.0021	.0008
#3	.0555	4.689	.9817	.0030	-.0001	2.899	.0001	-.0001	-.0007	.0009

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.737	-.0001	.0119	.0035	-.0007	.0038	.0150
Stddev	.003	.0002	.0000	.0001	.0006	.0002	.0000
%RSD	.1455	147.9	.1904	2.759	79.17	4.658	.2710
#1	1.736	.0001	.0119	.0034	-.0005	.0039	.0150
#2	1.736	-.0001	.0119	.0035	-.0014	.0036	.0150
#3	1.740	-.0003	.0119	.0036	-.0003	.0039	.0151

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2634.9	6009.7	53646.	5304.4
Stddev	4.8	6.0	80.	38.2
%RSD	.18096	.09929	.14978	.72016
#1	2634.2	6014.0	53566.	5260.7
#2	2640.0	6012.2	53726.	5320.6
#3	2630.6	6002.9	53646.	5331.7

Zoom In Zoom Out

Sample Name: FA33994-1 Acquired: 5/19/2016 12:54:29 Type: Unk
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0004	.0561	.0120	.0795	.0000	455.5	.0016	.0065	.0013
Stddev	.0001	.0166	.0006	.0001	.0000	3.6	.0000	.0001	.0001
%RSD	26.67	29.55	5.245	.1544	261.8	.7884	1.141	2.006	6.129
#1	-.0003	.0513	.0115	.0793	.0000	453.9	.0016	.0065	.0013
#2	-.0004	.0745	.0117	.0795	.0001	453.0	.0016	.0063	.0014
#3	-.0005	.0424	.0127	.0796	.0000	459.6	.0016	.0066	.0013

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0157	.0827	52.50	326.6	2.853	.0136	F230.8	.0459	.0001
Stddev	.0002	.0026	.11	.9	.018	.0000	2.2	.0003	.0007
%RSD	.9906	3.186	.2044	.2809	.6334	.1317	.9552	.5751	679.1
#1	.0158	.0832	52.62	327.1	2.834	.0136	232.2	.0457	.0003
#2	.0157	.0799	52.41	325.5	2.870	.0136	232.0	.0462	-.0007
#3	.0155	.0851	52.47	327.1	2.855	.0136	228.3	.0459	.0007

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0003	.0017	23.74	-.0004	1.261	.0007	-.0010	.0118	.0143
Stddev	.0004	.0001	.03	.0001	.004	.0003	.0001	.0002	.0001
%RSD	134.9	8.918	.1182	16.46	.2923	36.50	11.20	2.020	.4359
#1	.0007	.0018	23.71	-.0004	1.264	.0004	-.0011	.0115	.0144
#2	-.0002	.0017	23.74	-.0004	1.257	.0009	-.0009	.0118	.0143
#3	.0004	.0015	23.76	-.0003	1.262	.0008	-.0009	.0120	.0142

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2035.8	5143.4	45314.	4976.1
Stddev	5.8	4.2	167.	16.1
%RSD	.28248	.08153	.36826	.32436
#1	2034.4	5146.9	45460.	4979.5
#2	2042.1	5144.6	45132.	4990.2
#3	2030.8	5138.7	45350.	4958.5

Zoom In Zoom Out

Sample Name: FA33994-2 Acquired: 5/19/2016 12:59:00 Type: Unk
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0002	5.950	.0048	.2420	.0005	396.4	.0008	.0052	.0073
Stddev	.0002	.038	.0007	.0004	.0001	6.0	.0000	.0000	.0002
%RSD	76.59	.6352	14.01	.1500	17.26	1.519	2.923	.9081	2.902
#1	-.0004	5.985	.0041	.2417	.0006	389.4	.0008	.0051	.0070
#2	-.0001	5.956	.0047	.2418	.0004	400.0	.0008	.0052	.0075
#3	-.0002	5.910	.0054	.2424	.0004	399.7	.0008	.0052	.0073

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0207	3.571	41.72	225.9	F5.137	.0058	F178.4	.0369	.0053
Stddev	.0004	.010	.03	.6	.008	.0002	1.4	.0004	.0002
%RSD	1.904	.2885	.0790	.2825	.1643	2.724	.7794	.9826	3.494
#1	.0206	3.567	41.71	225.1	5.139	.0060	179.3	.0373	.0053
#2	.0211	3.563	41.69	226.3	5.145	.0058	176.8	.0367	.0055
#3	.0203	3.582	41.75	226.2	5.128	.0057	179.1	.0367	.0051

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0007	.0033	28.11	-.0001	1.452	.1057	-.0003	.0127	.0472
Stddev	.0006	.0020	.09	.0001	.001	.0029	.0004	.0003	.0002
%RSD	82.83	60.60	.3167	111.3	.0470	2.707	105.6	2.073	.3449
#1	-.0010	.0025	28.19	.0000	1.451	.1090	-.0008	.0130	.0471
#2	.0000	.0018	28.02	-.0002	1.452	.1038	.0000	.0126	.0474
#3	-.0012	.0055	28.12	-.0001	1.452	.1043	-.0002	.0126	.0471

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2079.8	5228.5	46424.	5091.0
Stddev	2.0	7.2	214.	12.3
%RSD	.09554	.13789	.46172	.24237
#1	2081.8	5234.8	46208.	5105.2
#2	2077.8	5230.2	46636.	5084.9
#3	2079.9	5220.6	46428.	5082.8

Zoom In Zoom Out

Sample Name: FA33994-3 Acquired: 5/19/2016 13:03:31 Type: Unk
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0001	6.501	.0050	.2534	.0005	397.5	.0008	.0052	.0076
Stddev	.0000	.023	.0003	.0005	.0001	4.2	.0000	.0001	.0004
%RSD	30.09	.3554	6.624	.1869	11.48	1.068	4.317	1.726	5.580
#1	-.0001	6.527	.0051	.2536	.0005	393.4	.0009	.0052	.0073
#2	.0000	6.491	.0046	.2537	.0004	401.8	.0009	.0053	.0081
#3	-.0001	6.484	.0052	.2528	.0004	397.3	.0008	.0052	.0074

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0224	3.850	42.41	228.7	F5.212	.0060	F178.1	.0374	.0052
Stddev	.0004	.029	.08	.5	.042	.0001	2.7	.0002	.0003
%RSD	1.899	.7472	.1917	.2129	.7977	2.238	1.517	.4337	5.047
#1	.0223	3.871	42.38	228.4	5.242	.0059	179.7	.0372	.0050
#2	.0220	3.862	42.50	229.2	5.164	.0059	179.6	.0375	.0055
#3	.0228	3.817	42.35	228.3	5.228	.0062	174.9	.0373	.0051

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0011	.0034	29.66	.0000	1.469	.1212	.0000	.0134	.0487
Stddev	.0011	.0009	.07	.0003	.003	.0039	.000	.0004	.0003
%RSD	95.73	26.78	.2237	663.6	.1782	3.206	3841.	3.165	.5823
#1	-.0018	.0043	29.72	.0003	1.470	.1167	-.0003	.0138	.0486
#2	-.0016	.0025	29.65	.0001	1.472	.1235	-.0001	.0133	.0484
#3	.0001	.0035	29.59	-.0002	1.466	.1235	.0004	.0130	.0490

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2075.3	5207.0	46350.	5108.4
Stddev	4.1	11.0	178.	21.3
%RSD	.19666	.21046	.38366	.41702
#1	2071.7	5204.2	46146.	5132.8
#2	2079.7	5219.0	46435.	5093.4
#3	2074.4	5197.6	46471.	5099.0

Zoom In Zoom Out

Sample Name: FA33994-4 Acquired: 5/19/2016 13:08:03 Type: Unk
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0000	.0545	.0196	.0730	.0000	349.5	.0007	.0002	.0021
Stddev	.0003	.0051	.0005	.0002	.0000	5.5	.0000	.0000	.0001
%RSD	746.4	9.344	2.621	.3388	75.80	1.578	2.943	11.64	6.900
#1	.0002	.0503	.0202	.0730	.0000	345.3	.0007	.0002	.0021
#2	-.0003	.0602	.0195	.0732	.0000	355.8	.0007	.0002	.0023
#3	.0001	.0531	.0192	.0727	.0000	347.5	.0007	.0002	.0020

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0075	.0498	42.90	194.5	2.904	.0110	F258.1	.0560	.0016
Stddev	.0003	.0015	.20	1.1	.004	.0001	3.4	.0000	.0008
%RSD	4.336	2.931	.4699	.5468	.1456	.8729	1.311	.0265	48.85
#1	.0074	.0483	42.78	193.7	2.907	.0109	255.7	.0560	.0019
#2	.0073	.0500	43.13	195.7	2.906	.0110	262.0	.0560	.0007
#3	.0079	.0512	42.78	194.1	2.899	.0111	256.8	.0561	.0021

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0015	.0361	29.51	-.0006	.7269	.0015	-.0007	.0100	.0102
Stddev	.0009	.0005	.03	.0001	.0020	.0000	.0003	.0003	.0000
%RSD	59.70	1.437	.0875	11.72	.2818	1.242	49.57	2.636	.3933
#1	-.0023	.0366	29.49	-.0006	.7259	.0015	-.0003	.0098	.0102
#2	-.0005	.0361	29.50	-.0007	.7293	.0015	-.0007	.0099	.0103
#3	-.0016	.0355	29.54	-.0005	.7256	.0015	-.0010	.0103	.0102

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2086.1	5212.7	46181.	5019.8
Stddev	4.0	8.5	140.	49.0
%RSD	.18936	.16267	.30251	.97700
#1	2089.6	5219.3	46028.	5061.0
#2	2086.8	5215.6	46215.	4965.6
#3	2081.8	5203.1	46301.	5032.8

Zoom In Zoom Out

Sample Name: FA33994-5 Acquired: 5/19/2016 13:12:35 Type: Unk
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0003	-.0041	-.0001	.0001	.0000	.1095	.0000	-.0001	.0003	.0003
Stddev	.0004	.0060	.0005	.0002	.000	.0055	.0000	.0001	.0003	.0001
%RSD	113.0	149.0	390.2	189.3	193.4	4.981	396.5	86.95	90.94	31.88
#1	.0007	-.0026	.0003	.0000	-.0001	.1032	.0000	-.0002	.0006	.0003
#2	.0000	-.0107	-.0006	.0000	.0000	.1126	.0001	.0000	.0001	.0003
#3	.0002	.0011	.0000	.0003	.0000	.1126	.0000	-.0001	.0002	.0005

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	-.0055	.0378	.0408	.0004	-.0004	.3871	-.0001	.0003	-.0025	-.0004
Stddev	.0008	.0066	.0296	.0000	.0001	.0063	.0000	.0002	.0005	.0002
%RSD	14.26	17.38	72.52	7.835	39.03	1.633	66.50	61.83	19.19	50.81
#1	-.0050	.0452	.0067	.0004	-.0005	.3903	.0000	.0003	-.0026	-.0006
#2	-.0050	.0326	.0557	.0004	-.0003	.3799	-.0001	.0004	-.0030	-.0002
#3	-.0064	.0356	.0599	.0004	-.0003	.3913	-.0001	.0001	-.0020	-.0006

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.8098	.0000	.0003	-.0004	-.0005	-.0001	.0069
Stddev	.0008	.000	.0000	.0001	.0002	.0001	.0000
%RSD	.1026	554.4	12.26	37.85	36.78	71.60	.5808
#1	.8096	-.0002	.0003	-.0005	-.0006	.0000	.0070
#2	.8091	.0002	.0003	-.0002	-.0003	-.0002	.0069
#3	.8107	-.0001	.0004	-.0005	-.0006	-.0002	.0069

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2666.8	5953.9	54320.	5347.6
Stddev	.9	4.2	78.	59.4
%RSD	.03540	.07025	.14296	1.1106
#1	2665.8	5950.6	54291.	5279.0
#2	2667.7	5958.6	54260.	5381.6
#3	2666.8	5952.5	54407.	5382.2

Zoom In Zoom Out

Sample Name: FA34033-1 Acquired: 5/19/2016 13:16:46 Type: Unk
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0004	3.781	.0004	.0885	.0003	74.34	.0009	.0004	.0151	.0035
Stddev	.0001	.033	.0002	.0007	.0001	.17	.0000	.0001	.0003	.0001
%RSD	19.47	.8724	50.74	.7348	22.07	.2304	1.835	27.21	1.737	2.899
#1	.0005	3.815	.0002	.0892	.0003	74.54	.0009	.0005	.0149	.0036
#2	.0004	3.781	.0006	.0881	.0002	74.26	.0008	.0003	.0150	.0036
#3	.0003	3.749	.0003	.0881	.0003	74.23	.0009	.0005	.0154	.0034

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	2.387	2.286	21.38	.1052	-.0002	6.627	.0065	.0020	-.0025	.0007
Stddev	.018	.016	.06	.0004	.0002	.028	.0001	.0002	.0004	.0011
%RSD	.7616	.6932	.2804	.4148	80.81	.4254	2.175	11.96	16.67	172.6
#1	2.403	2.292	21.44	.1057	-.0004	6.659	.0067	.0021	-.0021	-.0003
#2	2.390	2.299	21.32	.1049	-.0002	6.614	.0064	.0018	-.0024	.0020
#3	2.367	2.269	21.37	.1049	.0000	6.607	.0065	.0022	-.0029	.0003

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	13.65	.0000	.1380	.1278	-.0009	.0089	.0309
Stddev	.05	.000	.0005	.0053	.0000	.0002	.0002
%RSD	.3821	3133.	.3889	4.159	3.747	2.808	.7660
#1	13.60	.0002	.1386	.1222	-.0009	.0088	.0306
#2	13.70	.0002	.1378	.1328	-.0009	.0087	.0311
#3	13.66	-.0004	.1376	.1285	-.0009	.0092	.0309

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2466.9	5870.5	52767.	5288.8
Stddev	5.8	5.2	262.	20.9
%RSD	.23460	.08880	.49642	.39526
#1	2463.3	5874.0	52547.	5264.7
#2	2473.5	5872.9	53057.	5299.5
#3	2463.8	5864.5	52698.	5302.1

Zoom In Zoom Out

Sample Name: FA34033-2 Acquired: 5/19/2016 13:20:53 Type: Unk
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	-.0049	-.0003	-.0001	.0000	.0464	.0000	-.0001	.0002	.0000
Stddev	.0001	.0053	.0007	.0001	.000	.0023	.000	.0000	.0002	.0000
%RSD	126.7	108.4	277.1	80.31	726.5	4.985	77.94	29.79	96.55	86.92
#1	-.0001	.0008	.0005	-.0002	-.0001	.0445	.0000	-.0001	.0003	.0001
#2	-.0001	-.0096	-.0009	.0000	.0001	.0490	.0000	-.0001	.0002	.0001
#3	.0000	-.0057	-.0003	-.0002	.0000	.0458	.0000	-.0001	.0000	.0000

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	-.0060	.0066	.0238	.0001	-.0003	.0911	.0001	-.0001	-.0014	.0002
Stddev	.0021	.0175	.0239	.0000	.0000	.0050	.0000	.0005	.0006	.0004
%RSD	34.23	264.3	100.5	30.29	4.912	5.523	12.58	804.4	40.27	263.4
#1	-.0041	.0027	.0025	.0001	-.0003	.0957	.0001	-.0007	-.0018	.0005
#2	-.0058	.0257	.0496	.0001	-.0003	.0857	.0001	.0003	-.0008	-.0003
#3	-.0082	-.0086	.0192	.0001	-.0003	.0919	.0001	.0002	-.0017	.0002

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0340	-.0001	.0001	-.0003	-.0005	-.0001	.0061
Stddev	.0005	.0001	.0001	.0000	.0002	.0001	.0001
%RSD	1.599	156.8	39.95	2.717	29.39	58.25	.8731
#1	.0346	-.0002	.0001	-.0003	-.0007	.0000	.0061
#2	.0339	.0000	.0002	-.0003	-.0005	-.0001	.0061
#3	.0335	.0000	.0002	-.0003	-.0004	-.0001	.0062

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2665.1	5957.0	54312.	5334.3
Stddev	2.5	4.5	361.	15.4
%RSD	.09471	.07504	.66406	.28930
#1	2664.0	5959.2	53961.	5335.7
#2	2668.0	5960.0	54292.	5349.0
#3	2663.3	5951.9	54681.	5318.2

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/19/2016 13:25:05 Type: QC
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2538	40.77	2.075	2.084	2.047	40.71	2.080	2.077	2.012	2.023
Stddev	.0007	.05	.001	.003	.005	.11	.002	.001	.001	.003
%RSD	.2710	.1130	.0616	.1570	.2314	.2784	.0738	.0332	.0648	.1643
#1	.2533	40.81	2.075	2.088	2.051	40.79	2.082	2.078	2.011	2.026
#2	.2535	40.77	2.073	2.082	2.048	40.76	2.080	2.077	2.012	2.020
#3	.2546	40.72	2.076	2.083	2.041	40.58	2.079	2.076	2.013	2.024
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.55	41.10	40.91	2.070	2.074	40.67	2.087	2.023	2.062	2.066
Stddev	.12	.08	.20	.002	.007	.12	.002	.003	.004	.003
%RSD	.2964	.1901	.4800	.0909	.3265	.2945	.0946	.1327	.2142	.1487
#1	41.58	41.19	40.97	2.067	2.067	40.79	2.089	2.023	2.059	2.063
#2	41.65	41.06	41.06	2.070	2.076	40.68	2.088	2.026	2.060	2.068
#3	41.41	41.05	40.69	2.071	2.080	40.55	2.085	2.021	2.067	2.067
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.152	2.112	2.065	2.051	2.048	2.047	2.068
Stddev	.005	.005	.003	.002	.005	.001	.005
%RSD	.2114	.2269	.1497	.1133	.2624	.0655	.2337
#1	2.150	2.118	2.068	2.053	2.042	2.046	2.072
#2	2.150	2.111	2.065	2.048	2.052	2.047	2.069
#3	2.158	2.109	2.062	2.052	2.049	2.049	2.063
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/19/2016 13:25:05 Type: QC
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2301.8	5681.2	51711.	5298.3
Stddev	2.2	3.2	29.	9.4
%RSD	.09774	.05633	.05521	.17692
#1	2304.3	5684.7	51737.	5292.5
#2	2299.9	5680.4	51680.	5293.2
#3	2301.4	5678.4	51715.	5309.1

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/19/2016 13:29:00 Type: QC
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	-.0071	.0002	.0003	.0003	.0098	.0001	.0000	.0002
Stddev	.0002	.0056	.0004	.0001	.0000	.0008	.0001	.0001	.0002
%RSD	36.87	78.77	194.7	30.18	4.767	8.491	40.10	257.5	94.93
#1	.0006	-.0039	.0005	.0004	.0003	.0099	.0002	.0000	.0003
#2	.0004	-.0135	.0004	.0002	.0003	.0105	.0001	.0001	.0002
#3	.0003	-.0038	-.0003	.0003	.0003	.0089	.0001	.0000	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0315	-.0062	.0275	.0003	F.0020	.0341	.0001	.0005
Stddev	.0001	.0101	.0310	.0032	.0001	.0006	.0086	.0002	.0002
%RSD	49.30	32.10	502.6	11.59	16.74	29.35	25.31	143.8	32.69
#1	.0001	.0410	-.0343	.0294	.0004	.0026	.0440	.0002	.0004
#2	.0004	.0326	-.0113	.0293	.0003	.0018	.0298	.0003	.0006
#3	.0002	.0209	.0271	.0238	.0003	.0015	.0285	-.0001	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0007	-.0008	.0062	.0004	.0004	.0018	-.0001	.0002	.0000
Stddev	.0001	.0014	.0007	.0002	.0000	.0002	.0003	.0001	.000
%RSD	17.69	176.3	10.74	53.15	11.27	11.19	282.7	47.74	957.1
#1	-.0006	-.0007	.0069	.0002	.0003	.0020	.0001	.0001	.0000
#2	-.0008	.0005	.0056	.0007	.0004	.0019	-.0005	.0003	.0000
#3	-.0007	-.0022	.0060	.0003	.0004	.0016	.0001	.0003	.0000
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/19/2016 13:29:00 Type: QC
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2635.2	5889.8	53166.	5232.0
Stddev	4.4	6.9	133.	76.1
%RSD	.16794	.11791	.24932	1.4550
#1	2632.3	5888.7	53279.	5177.4
#2	2633.1	5897.2	53200.	5199.6
#3	2640.3	5883.5	53020.	5319.0

Zoom In Zoom Out

Sample Name: ICV Acquired: 5/19/2016 13:53:17 Type: QC
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2490	41.83	2.018	2.113	2.097	42.78	2.057	2.070	2.079	2.023
Stddev	.0002	.03	.002	.006	.005	.07	.003	.002	.008	.010
%RSD	.0827	.0708	.0894	.2710	.2451	.1585	.1329	.0749	.3832	.4865
#1	.2490	41.86	2.016	2.120	2.102	42.76	2.056	2.069	2.075	2.034
#2	.2488	41.81	2.017	2.112	2.093	42.73	2.060	2.071	2.074	2.016
#3	.2492	41.81	2.020	2.108	2.094	42.86	2.055	2.069	2.088	2.019
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.12	42.55	43.14	2.111	1.905	43.12	2.072	2.043	2.036	2.052
Stddev	.06	.09	.12	.008	.004	.06	.002	.002	.001	.005
%RSD	.1521	.2099	.2839	.3903	.1926	.1451	.1096	.0903	.0531	.2406
#1	41.18	42.65	43.03	2.103	1.902	43.19	2.069	2.042	2.035	2.049
#2	41.06	42.48	43.12	2.111	1.909	43.07	2.074	2.045	2.037	2.058
#3	41.13	42.51	43.27	2.119	1.906	43.10	2.072	2.041	2.036	2.050
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0770	2.033	1.986	1.972	2.114	1.914	2.080
Stddev	.0005	.000	.004	.002	.007	.003	.001
%RSD	.5889	.0137	.2270	.0862	.3288	.1689	.0674
#1	.0766	2.033	1.991	1.974	2.108	1.913	2.078
#2	.0770	2.033	1.983	1.970	2.121	1.913	2.081
#3	.0775	2.033	1.983	1.972	2.114	1.918	2.080
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: ICV Acquired: 5/19/2016 13:53:17 Type: QC
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2285.3	5709.5	50125.	5172.4
Stddev	5.3	7.1	338.	53.8
%RSD	.23305	.12402	.67400	1.0408
#1	2291.4	5717.1	50466.	5232.1
#2	2283.1	5708.3	50119.	5157.8
#3	2281.5	5703.1	49790.	5127.5

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/19/2016 14:00:48 Type: QC
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2504	40.36	1.993	1.995	2.015	40.59	2.028	2.019	2.037	2.013
Stddev	.0005	.07	.001	.002	.003	.05	.003	.001	.007	.008
%RSD	.2122	.1824	.0475	.0954	.1413	.1172	.1292	.0525	.3342	.3801
#1	.2504	40.32	1.994	1.996	2.018	40.57	2.029	2.019	2.044	2.013
#2	.2498	40.45	1.993	1.994	2.015	40.65	2.025	2.018	2.036	2.005
#3	.2509	40.32	1.993	1.993	2.013	40.56	2.030	2.020	2.031	2.020
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.52	40.39	40.54	2.049	2.016	40.74	2.020	1.996	1.993	1.998
Stddev	.04	.07	.18	.007	.004	.05	.003	.002	.002	.001
%RSD	.1028	.1795	.4337	.3496	.2084	.1145	.1452	.1002	.1033	.0645
#1	41.49	40.36	40.45	2.055	2.012	40.71	2.021	1.998	1.991	1.997
#2	41.57	40.47	40.74	2.051	2.015	40.79	2.017	1.994	1.992	1.999
#3	41.50	40.34	40.43	2.041	2.021	40.71	2.022	1.996	1.995	1.999
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.067	2.035	2.036	2.060	2.012	2.034	2.029
Stddev	.002	.003	.004	.003	.006	.002	.004
%RSD	.0904	.1637	.1743	.1423	.2779	.1045	.2021
#1	2.069	2.037	2.040	2.063	2.017	2.036	2.031
#2	2.065	2.031	2.033	2.057	2.014	2.034	2.025
#3	2.067	2.037	2.035	2.060	2.006	2.031	2.032
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/19/2016 14:00:48 Type: QC
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2293.3	5749.5	50711.	5254.8
Stddev	1.2	11.5	288.	56.6
%RSD	.05227	.19986	.56783	1.0769
#1	2293.8	5752.7	50514.	5302.4
#2	2294.2	5759.1	50577.	5192.2
#3	2291.9	5736.8	51041.	5269.8

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/19/2016 14:08:05 Type: QC
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	-.0008	-.0004	.0005	.0004	.0091	.0001	.0000	.0001
Stddev	.001	.0067	.0005	.0000	.0001	.0055	.0000	.000	.0004
%RSD	3310.	861.8	138.9	9.449	11.85	61.05	33.96	349.6	398.2
#1	-.0005	-.0079	.0000	.0005	.0005	.0135	.0002	.0000	.0005
#2	-.0001	.0001	-.0002	.0005	.0004	.0108	.0001	.0001	-.0001
#3	.0005	.0054	-.0009	.0004	.0004	.0029	.0001	-.0001	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0212	.0323	-.0066	.0002	.0009	.0002	.0000	F.0010
Stddev	.0002	.0034	.0268	.0265	.0000	.0002	.0076	.000	.0005
%RSD	93.84	16.01	82.81	402.1	4.951	22.49	3164.	1111.	51.93
#1	.0003	.0248	.0568	.0231	.0002	.0010	.0062	.0001	.0015
#2	.0003	.0209	.0364	-.0275	.0002	.0010	.0029	.0001	.0012
#3	.0000	.0180	.0037	-.0153	.0002	.0007	-.0084	-.0002	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit									.0010
Low Limit									-.0010

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0011	.0006	.0001	.0005	.0005	.0010	-.0003	.0004	.0000
Stddev	.0005	.0013	.0003	.0003	.0000	.0001	.0006	.0001	.0001
%RSD	43.98	232.7	394.1	57.23	9.611	11.71	193.1	14.70	697.6
#1	.0016	-.0009	.0004	.0008	.0005	.0011	.0003	.0004	.0001
#2	.0010	.0013	.0000	.0002	.0005	.0009	-.0009	.0003	.0000
#3	.0007	.0014	-.0002	.0005	.0004	.0010	-.0003	.0003	-.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/19/2016 14:08:05 Type: QC
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2633.8	5947.0	52762.	5191.9
Stddev	.5	7.8	261.	33.0
%RSD	.01981	.13037	.49451	.63564
#1	2633.7	5940.5	52613.	5229.7
#2	2633.3	5944.9	53063.	5169.2
#3	2634.3	5955.6	52609.	5176.7

Zoom In Zoom Out

Sample Name: FA34033-3 Acquired: 5/19/2016 14:12:09 Type: Unk
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.0358	-.0005	.0448	.0000	90.04	.0000	-.0003	.0012	.0009
Stddev	.000	.0054	.0003	.0002	.0001	.26	.0001	.0001	.0003	.0003
%RSD	1290.	15.11	55.76	.3704	150.6	.2882	345.1	50.99	24.45	28.59
#1	-.0004	.0421	-.0006	.0449	.0000	90.07	.0001	-.0003	.0014	.0007
#2	.0001	.0327	-.0002	.0446	.0001	89.77	.0000	-.0004	.0009	.0009
#3	.0002	.0327	-.0008	.0448	.0001	90.28	.0000	-.0001	.0013	.0012

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0214	9.576	23.87	.0021	.0003	12.62	-.0003	.0010	.0007	.0018
Stddev	.0023	.051	.02	.0000	.0002	.04	.0002	.0004	.0002	.0005
%RSD	10.71	.5362	.1038	1.784	62.87	.3045	66.50	42.77	24.90	26.04
#1	.0190	9.635	23.85	.0022	.0004	12.64	-.0001	.0005	.0008	.0016
#2	.0236	9.539	23.86	.0021	.0001	12.57	-.0004	.0014	.0009	.0023
#3	.0214	9.555	23.90	.0021	.0002	12.63	-.0003	.0011	.0005	.0014

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	13.57	.0002	.2174	.0024	-.0003	.0023	.0078
Stddev	.01	.0003	.0004	.0001	.0004	.0001	.0000
%RSD	.0956	159.9	.1712	3.372	120.5	4.488	.2855
#1	13.58	.0003	.2177	.0023	-.0007	.0023	.0078
#2	13.56	.0004	.2170	.0025	.0000	.0023	.0078
#3	13.57	-.0002	.2175	.0024	-.0003	.0025	.0078

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2425.2	5737.4	50963.	5231.3
Stddev	3.4	13.0	286.	39.6
%RSD	.13850	.22616	.56215	.75670
#1	2427.9	5730.5	50811.	5239.6
#2	2426.4	5752.3	50784.	5266.1
#3	2421.5	5729.3	51293.	5188.2

Zoom In Zoom Out

Sample Name: FA34033-4 Acquired: 5/19/2016 14:16:17 Type: Unk
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0002	.0278	-.0003	.0455	.0000	90.46	.0000	-.0002	.0007	.0006
Stddev	.0003	.0156	.0001	.0003	.0001	.54	.000	.0000	.0002	.0000
%RSD	139.2	56.08	38.18	.5633	14240.	.5918	105.9	24.14	28.80	7.739
#1	-.0001	.0354	-.0002	.0458	.0000	90.97	-.0001	-.0001	.0006	.0007
#2	.0000	.0381	-.0004	.0454	.0001	89.90	.0000	-.0002	.0006	.0006
#3	-.0005	.0099	-.0004	.0454	-.0001	90.51	.0000	-.0002	.0010	.0006

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0202	9.656	23.95	.0020	-.0001	12.69	-.0003	.0010	.0007	.0010
Stddev	.0019	.062	.13	.0000	.0001	.03	.0001	.0003	.0003	.0002
%RSD	9.357	.6436	.5421	1.133	77.27	.2737	35.91	36.68	46.07	21.48
#1	.0192	9.716	24.04	.0020	.0000	12.73	-.0004	.0012	.0005	.0008
#2	.0190	9.592	23.80	.0020	-.0001	12.68	-.0002	.0006	.0011	.0011
#3	.0223	9.660	24.01	.0020	-.0001	12.67	-.0003	.0010	.0006	.0012

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	13.46	-.0001	.2195	.0022	-.0004	.0020	.0068
Stddev	.00	.0001	.0005	.0000	.0009	.0001	.0000
%RSD	.0258	189.2	.2118	2.028	251.9	6.551	.3849
#1	13.47	-.0002	.2200	.0022	.0006	.0022	.0067
#2	13.46	.0000	.2194	.0022	-.0006	.0020	.0068
#3	13.46	.0000	.2191	.0021	-.0011	.0020	.0068

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2420.1	5764.7	50791.	5174.9
Stddev	2.2	7.6	164.	51.1
%RSD	.09045	.13206	.32353	.98809
#1	2418.4	5756.6	50612.	5131.8
#2	2422.6	5771.8	50828.	5231.4
#3	2419.2	5765.7	50934.	5161.6

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: FA34032-1 Acquired: 5/19/2016 14:20:26 Type: Unk
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0002	.2161	.0002	.1272	.0000	143.5	-.0001	-.0003	.0027	.0002
Stddev	.0005	.0110	.0004	.0006	.000	.3	.0000	.0000	.0002	.0002
%RSD	201.4	5.067	182.4	.4771	460.7	.1846	18.10	10.02	8.831	94.99
#1	-.0004	.2078	-.0002	.1272	.0000	143.7	-.0002	-.0003	.0029	.0000
#2	.0003	.2285	.0007	.1267	.0000	143.5	-.0001	-.0003	.0025	.0002
#3	-.0006	.2119	.0002	.1279	.0000	143.2	-.0001	-.0004	.0028	.0003

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.1575	4.993	39.12	.0058	.0000	18.40	-.0001	.0010	.0002	.0268
Stddev	.0077	.007	.08	.0000	.000	.04	.0000	.0004	.0003	.0003
%RSD	4.865	.1327	.1926	.4632	187.0	.1906	40.61	38.90	159.0	1.214
#1	.1493	4.998	39.20	.0058	.0000	18.44	-.0001	.0014	.0001	.0268
#2	.1585	4.996	39.13	.0058	.0000	18.37	-.0001	.0006	-.0001	.0265
#3	.1646	4.986	39.05	.0059	-.0001	18.38	-.0002	.0011	.0004	.0271

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	12.53	-.0001	.2597	.0041	-.0006	.0036	.0008
Stddev	.02	.0004	.0002	.0001	.0010	.0001	.0001
%RSD	.1717	274.2	.0950	3.605	171.4	3.413	7.458
#1	12.55	.0001	.2599	.0040	-.0016	.0036	.0008
#2	12.51	.0001	.2594	.0042	-.0008	.0035	.0008
#3	12.51	-.0006	.2596	.0042	.0005	.0037	.0009

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2365.8	5665.5	49443.	5154.4
Stddev	.6	9.6	136.	15.9
%RSD	.02655	.17028	.27483	.30759
#1	2365.1	5659.0	49429.	5136.5
#2	2366.2	5676.6	49586.	5160.0
#3	2366.2	5660.9	49315.	5166.8

Zoom In Zoom Out

Sample Name: FA34032-2 Acquired: 5/19/2016 14:24:34 Type: Unk
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0002	.0130	.0047	.0442	.0000	196.4	.0003	.0098	.0007
Stddev	.0005	.0007	.0003	.0002	.000	2.6	.0000	.0001	.0002
%RSD	237.6	5.262	5.922	.4448	203.4	1.345	9.343	.6892	37.52
#1	.0004	.0122	.0050	.0443	.0000	196.5	.0003	.0098	.0006
#2	-.0005	.0133	.0045	.0440	.0000	193.8	.0003	.0098	.0004
#3	-.0004	.0134	.0046	.0443	.0000	199.0	.0003	.0099	.0009

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0011	.0094	13.41	78.42	.9788	.0090	F87.38	.0104	.0017
Stddev	.0001	.0034	.10	.54	.0018	.0002	.44	.0001	.0008
%RSD	13.00	36.16	.7449	.6895	.1837	2.088	.5069	.5814	45.69
#1	.0012	.0064	13.49	78.91	.9809	.0088	87.85	.0104	.0019
#2	.0009	.0086	13.30	77.84	.9779	.0089	86.97	.0104	.0009
#3	.0012	.0131	13.43	78.50	.9777	.0091	87.32	.0105	.0024

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0007	.0081	20.36	-.0001	.2676	.0015	-.0008	.0043	.0101
Stddev	.0007	.0005	.03	.0002	.0013	.0001	.0005	.0001	.0001
%RSD	102.1	5.732	.1499	249.6	.4776	4.215	62.97	2.488	.7470
#1	-.0001	.0086	20.36	-.0003	.2690	.0015	-.0011	.0042	.0100
#2	.0011	.0079	20.32	.0001	.2665	.0014	-.0002	.0042	.0101
#3	.0010	.0078	20.39	.0000	.2673	.0016	-.0009	.0044	.0101

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2251.2	5506.0	47743.	5121.5
Stddev	1.5	10.1	30.	52.9
%RSD	.06514	.18334	.06373	1.0330
#1	2249.5	5506.1	47711.	5078.0
#2	2252.4	5516.0	47771.	5180.4
#3	2251.6	5495.8	47746.	5106.1

Zoom In Zoom Out

Sample Name: FA34032-3 Acquired: 5/19/2016 14:28:49 Type: Unk
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0001	.8258	.0097	.0483	.0001	381.3	.0054	.0497	.0044
Stddev	.0003	.0064	.0009	.0002	.0000	4.2	.0001	.0001	.0001
%RSD	309.1	.7727	9.756	.4467	24.38	1.114	1.416	.1930	1.283
#1	.0000	.8313	.0107	.0484	.0000	377.4	.0053	.0496	.0044
#2	.0001	.8188	.0090	.0480	.0001	385.8	.0054	.0497	.0044
#3	-.0005	.8272	.0093	.0483	.0001	380.8	.0055	.0498	.0043

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0272	.3508	61.19	278.4	F10.25	.0103	F183.1	.1740	.0010
Stddev	.0003	.0019	.28	1.2	.02	.0000	3.1	.0003	.0003
%RSD	.9798	.5351	.4593	.4434	.1509	.0894	1.699	.1995	29.23
#1	.0274	.3496	61.45	279.3	10.27	.0103	186.7	.1737	.0009
#2	.0273	.3498	61.22	279.0	10.24	.0103	181.2	.1744	.0013
#3	.0269	.3530	60.89	277.0	10.25	.0103	181.3	.1739	.0007

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0017	.0043	25.30	-.0002	.7690	.0142	.0021	.0133	.5593
Stddev	.0003	.0007	.02	.0003	.0024	.0021	.0009	.0002	.0008
%RSD	20.40	15.44	.0911	113.0	.3119	14.87	44.15	1.506	.1512
#1	.0020	.0050	25.32	-.0003	.7713	.0165	.0018	.0130	.5584
#2	.0014	.0039	25.28	-.0005	.7691	.0123	.0013	.0134	.5594
#3	.0015	.0039	25.28	.0000	.7666	.0137	.0031	.0134	.5600

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2057.3	5211.6	45425.	5019.4
Stddev	1.6	1.1	83.	34.0
%RSD	.07555	.02131	.18359	.67766
#1	2059.1	5212.5	45402.	4989.2
#2	2056.6	5210.3	45517.	5012.8
#3	2056.2	5211.9	45355.	5056.2

Zoom In Zoom Out

Sample Name: FA34032-4 Acquired: 5/19/2016 14:33:21 Type: Unk
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	.8378	.0178	.1076	.0000	41.52	.0000	-.0002	.0061	.0018
Stddev	.0002	.0106	.0002	.0006	.000	.29	.0000	.0001	.0005	.0005
%RSD	208.3	1.267	1.173	.5715	290.9	.6882	155.1	42.63	7.409	27.92
#1	.0002	.8376	.0179	.1083	-.0001	41.79	.0001	-.0002	.0065	.0018
#2	.0002	.8273	.0176	.1073	.0000	41.56	.0000	-.0002	.0061	.0012
#3	-.0001	.8485	.0180	.1072	.0001	41.22	.0000	-.0001	.0056	.0022

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.3438	11.30	11.86	.0744	.0159	60.05	.0013	.0005	.0001	.0007
Stddev	.0062	.06	.11	.0001	.0000	.31	.0000	.0007	.0003	.0003
%RSD	1.804	.5043	.9472	.1840	.2975	.5198	3.514	126.1	245.6	49.15
#1	.3475	11.37	11.95	.0745	.0158	60.41	.0013	.0004	-.0002	.0007
#2	.3367	11.27	11.89	.0742	.0159	59.89	.0012	-.0001	.0003	.0010
#3	.3473	11.27	11.73	.0744	.0159	59.84	.0013	.0013	.0002	.0004

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	13.32	.0000	.3278	.0153	-.0006	.0018	.0182
Stddev	.01	.0001	.0009	.0009	.0011	.0001	.0000
%RSD	.0747	338.6	.2806	5.629	170.8	8.292	.2173
#1	13.30	.0001	.3289	.0151	-.0019	.0017	.0182
#2	13.32	.0001	.3271	.0146	-.0001	.0019	.0183
#3	13.32	-.0001	.3276	.0163	.0001	.0017	.0182

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2420.1	5802.8	50721.	5192.9
Stddev	4.5	5.9	82.	96.7
%RSD	.18620	.10252	.16262	1.8618
#1	2421.8	5800.2	50679.	5122.9
#2	2414.9	5798.5	50816.	5152.5
#3	2423.4	5809.6	50668.	5303.2

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: FA34034-1 Acquired: 5/19/2016 14:37:29 Type: Unk
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0007	2.338	.0049	.0388	.0001	481.5	-.0004	.0008	.0051	.0073
Stddev	.0009	.057	.0008	.0001	.0002	1.3	.0001	.0002	.0005	.0005
%RSD	127.9	2.435	17.18	.2556	426.9	.2613	29.16	33.25	10.63	7.327
#1	.0004	2.377	.0042	.0389	.0001	481.0	-.0003	.0005	.0047	.0068
#2	.0000	2.272	.0047	.0387	-.0002	482.9	-.0006	.0007	.0057	.0074
#3	.0017	2.364	.0059	.0389	.0003	480.6	-.0004	.0010	.0049	.0078

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	1.504	8.471	22.31	.0519	.0131	188.4	.0033	.0071	-.0013	.0030
Stddev	.021	.115	.13	.0003	.0005	.3	.0006	.0019	.0054	.0049
%RSD	1.380	1.352	.5835	.6306	3.556	.1750	17.19	26.67	415.2	164.4
#1	1.485	8.501	22.20	.0518	.0131	188.4	.0028	.0062	-.0007	.0056
#2	1.501	8.568	22.27	.0522	.0135	188.7	.0039	.0093	-.0070	.0061
#3	1.526	8.345	22.45	.0516	.0126	188.1	.0032	.0059	.0038	-.0027

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.295	-.0010	2.984	.0268	.0012	.0093	.0701
Stddev	.008	.0006	.002	.0009	.0005	.0008	.0004
%RSD	.1548	53.45	.0718	3.187	44.51	8.326	.5757
#1	5.302	-.0014	2.984	.0261	.0007	.0088	.0696
#2	5.286	-.0013	2.986	.0277	.0018	.0102	.0703
#3	5.298	-.0004	2.982	.0265	.0012	.0089	.0703

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2415.0	5741.8	50519.	5199.5
Stddev	3.5	4.8	315.	37.2
%RSD	.14657	.08350	.62364	.71547
#1	2418.9	5746.7	50167.	5237.1
#2	2412.2	5737.1	50776.	5162.7
#3	2413.8	5741.6	50613.	5198.6

Zoom In Zoom Out

Sample Name: MP30374-MB1 Acquired: 5/19/2016 14:41:37 Type: QC
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0013	-.0012	.0000	-.0001	.0712	-.0001	-.0003	.0003	-.0001
Stddev	.0005	.0019	.0004	.000	.0000	.0032	.0000	.0000	.0001	.0000
%RSD	169.9	144.0	34.94	276.4	60.45	4.468	36.35	11.62	15.11	57.16
#1	-.0001	.0028	-.0016	.0001	.0000	.0681	.0000	-.0003	.0003	.0000
#2	-.0008	-.0008	-.0008	-.0002	-.0001	.0709	-.0001	-.0003	.0004	-.0001
#3	.0001	.0020	-.0010	.0000	-.0001	.0745	-.0001	-.0002	.0004	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0033	.0200	.0106	.0002	-.0001	.0761	-.0001	.0008	-.0001	.0024
Stddev	.0019	.0049	.0115	.0000	.0001	.0060	.0000	.0006	.0007	.0014
%RSD	57.59	24.41	107.8	14.67	54.93	7.837	46.48	74.24	557.2	59.71
#1	.0022	.0152	-.0004	.0002	.0000	.0829	-.0001	.0014	.0005	.0008
#2	.0022	.0249	.0225	.0002	-.0002	.0729	-.0001	.0003	.0000	.0027
#3	.0055	.0198	.0099	.0002	-.0002	.0723	-.0001	.0006	-.0009	.0036
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0097	.0216	.0000	.0005	-.0015	.0000	.0003
Stddev	.0002	.0003	.000	.0001	.0007	.0000	.0000
%RSD	1.620	1.395	1175.	17.34	44.50	95.23	9.967
#1	.0096	.0219	.0000	.0004	-.0020	.0000	.0004
#2	.0096	.0215	-.0001	.0006	-.0008	.0001	.0003
#3	.0099	.0213	.0000	.0006	-.0019	.0000	.0004
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP30374-MB1 Acquired: 5/19/2016 14:41:37 Type: QC
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2670.0	6020.1	53566.	5279.1
Stddev	3.1	2.5	214.	51.7
%RSD	.11697	.04083	.39907	.98014
#1	2672.1	6020.5	53359.	5243.8
#2	2666.4	6017.5	53786.	5338.5
#3	2671.5	6022.4	53554.	5255.0

Zoom In Zoom Out

Sample Name: MP30374-B1 Acquired: 5/19/2016 14:45:51 Type: QC
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0480	27.28	1.978	2.078	.0526	26.03	.0510	.5114	.2096	.2625
Stddev	.0000	.10	.002	.004	.0002	.10	.0001	.0002	.0004	.0004
%RSD	.1006	.3737	.1090	.1694	.3728	.3775	.1370	.0333	.2123	.1448
#1	.0480	27.16	1.980	2.075	.0524	25.92	.0511	.5116	.2099	.2628
#2	.0480	27.34	1.976	2.078	.0526	26.04	.0510	.5114	.2091	.2620
#3	.0481	27.34	1.978	2.082	.0528	26.12	.0510	.5112	.2098	.2626
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	26.15	25.64	25.46	.5266	.4899	25.82	.5165	.4923	.4937	1.990
Stddev	.07	.07	.02	.0011	.0002	.07	.0004	.0021	.0036	.002
%RSD	.2777	.2636	.0898	.2135	.0482	.2623	.0763	.4205	.7347	.1166
#1	26.08	25.57	25.44	.5279	.4897	25.74	.5166	.4929	.4897	1.992
#2	26.22	25.65	25.49	.5258	.4901	25.85	.5168	.4941	.4945	1.991
#3	26.17	25.70	25.46	.5261	.4897	25.87	.5161	.4900	.4969	1.988
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0098	.5288	.5012	.5050	1.983	.4831	.5097
Stddev	.0000	.0006	.0003	.0009	.003	.0016	.0010
%RSD	.3709	.1109	.0600	.1819	.1350	.3286	.1864
#1	.0098	.5293	.5015	.5059	1.985	.4844	.5094
#2	.0098	.5290	.5012	.5041	1.984	.4813	.5107
#3	.0098	.5282	.5009	.5051	1.980	.4835	.5088
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP30374-B1 Acquired: 5/19/2016 14:45:51 Type: QC
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2409.7	5813.5	51112.	5180.9
Stddev	4.3	7.8	180.	78.0
%RSD	.17958	.13361	.35267	1.5050
#1	2407.9	5807.2	50991.	5260.7
#2	2406.7	5811.2	51026.	5177.1
#3	2414.7	5822.2	51319.	5104.9

Zoom In Zoom Out

Sample Name: FA34018-1 Acquired: 5/19/2016 14:49:49 Type: Unk
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0003	162.6	.0197	1.312	.0060	24.39	.0011	.0081	.1698	.0156
Stddev	.0002	.5	.0001	.001	.0000	.08	.0000	.0000	.0006	.0001
%RSD	56.22	.3064	.6496	.0926	.2804	.3186	2.390	.4093	.3532	.3618
#1	.0004	162.0	.0196	1.313	.0060	24.48	.0011	.0081	.1699	.0156
#2	.0005	163.0	.0196	1.313	.0060	24.32	.0011	.0081	.1703	.0156
#3	.0001	162.7	.0198	1.311	.0060	24.38	.0011	.0082	.1692	.0157

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	56.58	1.283	4.472	.3174	.0015	2.486	.0520	.3496	-.0005	-.0011
Stddev	.16	.005	.037	.0004	.0001	.011	.0001	.0006	.0005	.0005
%RSD	.2790	.4202	.8369	.1354	7.514	.4598	.1423	.1774	85.27	49.28
#1	56.74	1.277	4.513	.3177	.0014	2.497	.0519	.3491	-.0008	-.0016
#2	56.43	1.285	4.439	.3175	.0015	2.474	.0520	.3503	-.0008	-.0005
#3	56.56	1.287	4.463	.3169	.0016	2.487	.0520	.3493	.0000	-.0011

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.180	.0124	2.246	.9199	-.0099	.0684	.0928
Stddev	.002	.0001	.057	.0008	.0005	.0001	.0001
%RSD	.1943	1.168	2.544	.0917	4.756	.1831	.1231
#1	1.182	.0124	2.302	.9189	-.0103	.0685	.0927
#2	1.178	.0125	2.188	.9200	-.0094	.0682	.0930
#3	1.181	.0122	2.248	.9206	-.0101	.0684	.0928

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2346.8	12921.	110350.	11450.
Stddev	2.4	15.	153.	82.
%RSD	.10429	.11486	.13864	.71237
#1	2347.5	12938.	110500.	11399.
#2	2344.1	12914.	110190.	11544.
#3	2348.9	12911.	110370.	11408.

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/19/2016 14:54:06 Type: QC
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2512	40.58	2.012	2.014	2.023	40.89	2.036	2.028	2.043	2.012
Stddev	.0007	.04	.003	.007	.004	.08	.002	.001	.002	.001
%RSD	.2966	.1044	.1377	.3403	.1721	.1924	.0923	.0536	.1061	.0369
#1	.2518	40.54	2.011	2.006	2.021	40.90	2.036	2.029	2.043	2.013
#2	.2513	40.62	2.009	2.019	2.027	40.97	2.034	2.026	2.045	2.011
#3	.2504	40.56	2.015	2.017	2.022	40.81	2.038	2.028	2.040	2.012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.63	40.84	40.89	2.060	2.021	41.01	2.034	2.001	2.000	2.012
Stddev	.04	.03	.13	.001	.004	.09	.001	.003	.004	.001
%RSD	.0863	.0827	.3283	.0543	.1810	.2172	.0597	.1603	.2207	.0420
#1	41.60	40.85	40.91	2.060	2.018	41.04	2.033	2.002	2.001	2.011
#2	41.67	40.86	41.02	2.061	2.020	41.08	2.033	1.997	1.995	2.012
#3	41.61	40.80	40.75	2.059	2.025	40.91	2.035	2.003	2.004	2.012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.079	2.055	2.042	2.058	2.017	2.042	2.041
Stddev	.004	.003	.003	.001	.001	.001	.002
%RSD	.2047	.1262	.1689	.0514	.0564	.0369	.0791
#1	2.081	2.054	2.039	2.059	2.018	2.042	2.041
#2	2.074	2.053	2.046	2.057	2.015	2.043	2.039
#3	2.082	2.058	2.042	2.059	2.017	2.042	2.042
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/19/2016 14:54:06 Type: QC
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2304.5	5761.5	50764.	5188.7
Stddev	7.1	14.3	55.	18.8
%RSD	.30753	.24810	.10806	.36194
#1	2308.8	5771.0	50742.	5172.1
#2	2308.5	5768.5	50724.	5184.8
#3	2296.4	5745.0	50827.	5209.1

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/19/2016 14:58:01 Type: QC
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	-.0029	.0005	.0001	.0001	.0029	.0001	.0000	.0001
Stddev	.0003	.0058	.0003	.0002	.0001	.0010	.0000	.000	.0001
%RSD	259.6	197.6	55.19	232.0	111.6	33.64	21.23	258.8	160.5
#1	.0003	-.0011	.0009	-.0001	.0000	.0026	.0001	-.0001	.0000
#2	-.0002	-.0093	.0005	.0001	.0001	.0021	.0000	.0001	.0000
#3	.0002	.0017	.0003	.0003	.0001	.0040	.0001	.0000	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0353	.0032	.0062	.0001	F.0021	-.0046	-.0001	.0002
Stddev	.0001	.0070	.0180	.0087	.0000	.0006	.0110	.0002	.0004
%RSD	36.52	19.85	568.9	140.9	13.30	26.48	237.3	251.1	236.6
#1	.0002	.0431	.0239	-.0034	.0001	.0028	-.0167	.0000	.0004
#2	.0004	.0336	-.0069	.0084	.0001	.0020	.0047	.0001	-.0003
#3	.0002	.0294	-.0075	.0135	.0001	.0016	-.0018	-.0004	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0019	.0015	-.0002	.0002	.0001	.0017	-.0001	.0002	-.0001
Stddev	.0002	.0003	.0002	.0001	.0001	.0002	.0001	.0001	.0000
%RSD	12.37	21.74	113.9	50.24	107.6	9.926	105.5	39.09	45.35
#1	.0021	.0013	-.0002	.0003	.0001	.0018	-.0003	.0001	-.0001
#2	.0018	.0018	.0000	.0001	.0000	.0016	-.0001	.0002	-.0001
#3	.0017	.0012	-.0003	.0003	.0002	.0015	.0000	.0002	-.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/19/2016 14:58:01 Type: QC
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2624.6	5958.1	52534.	5120.7
Stddev	2.2	10.0	134.	67.8
%RSD	.08430	.16769	.25559	1.3245
#1	2623.2	5948.7	52607.	5052.7
#2	2627.2	5968.6	52379.	5188.3
#3	2623.4	5956.8	52616.	5121.2

Zoom In Zoom Out

Sample Name: MP30374-D1 Acquired: 5/19/2016 15:02:14 Type: Unk
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0003	148.0	.0183	1.193	.0053	12.52	.0008	.0081	.1562	.0193
Stddev	.0001	.5	.0000	.004	.0000	.02	.0000	.0001	.0005	.0001
%RSD	20.73	.3145	.2129	.2924	.6796	.1990	.8084	.8719	.3221	.4737
#1	.0003	148.2	.0183	1.197	.0053	12.52	.0009	.0082	.1567	.0192
#2	.0002	148.4	.0183	1.193	.0053	12.55	.0008	.0080	.1557	.0194
#3	.0004	147.5	.0183	1.190	.0052	12.50	.0008	.0081	.1563	.0193

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	55.97	1.288	4.234	.3101	.0019	1.899	.0508	.3335	-.0014	-.0001
Stddev	.04	.007	.024	.0009	.0002	.000	.0000	.0012	.0003	.0009
%RSD	.0676	.5561	.5747	.2772	8.243	.0134	.0934	.3534	23.41	872.8
#1	55.97	1.280	4.210	.3109	.0020	1.899	.0508	.3323	-.0013	-.0007
#2	56.01	1.288	4.259	.3092	.0018	1.900	.0508	.3336	-.0012	-.0007
#3	55.93	1.294	4.233	.3102	.0018	1.899	.0509	.3347	-.0018	.0010

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.122	.0130	2.019	.8466	-.0072	.0629	.0937
Stddev	.001	.0000	.012	.0014	.0007	.0003	.0001
%RSD	.0761	.1720	.6130	.1699	10.17	.4660	.1588
#1	1.122	.0130	2.005	.8483	-.0073	.0631	.0935
#2	1.123	.0130	2.021	.8461	-.0065	.0631	.0938
#3	1.121	.0130	2.030	.8455	-.0079	.0626	.0938

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2389.6	11844.	102100.	10365.
Stddev	3.7	18.	244.	34.
%RSD	.15293	.15240	.23934	.33103
#1	2390.8	11854.	101820.	10398.
#2	2385.5	11823.	102280.	10329.
#3	2392.5	11855.	102190.	10367.

Zoom In Zoom Out

Sample Name: MP30374-SD1 Acquired: 5/19/2016 15:06:33 Type: Unk
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	63.56	.0077	.5075	.0023	9.536	.0004	.0034	.0665	.0063
Stddev	.0002	.35	.0002	.0020	.0000	.072	.0000	.0001	.0002	.0001
%RSD	192.7	.5555	2.479	.3976	.7201	.7586	7.621	2.179	.3339	1.693
#1	.0003	63.95	.0079	.5094	.0023	9.611	.0004	.0034	.0667	.0064
#2	.0001	63.48	.0075	.5076	.0024	9.532	.0004	.0033	.0662	.0062
#3	-.0001	63.26	.0076	.5054	.0024	9.466	.0004	.0034	.0665	.0063

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	22.12	.5176	1.789	.1259	.0005	.9868	.0212	.0729	-.0004	.0001
Stddev	.12	.0080	.015	.0003	.0001	.0020	.0001	.0009	.0008	.0010
%RSD	.5355	1.537	.8128	.2469	16.83	.2032	.4213	1.194	208.7	849.3
#1	22.25	.5120	1.806	.1262	.0005	.9857	.0212	.0739	-.0011	-.0006
#2	22.09	.5140	1.784	.1256	.0004	.9891	.0211	.0723	.0005	-.0002
#3	22.02	.5267	1.778	.1258	.0005	.9855	.0213	.0726	-.0006	.0012

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.4657	.0050	.8823	.3536	-.0009	.0266	.0433
Stddev	.0010	.0002	.0040	.0005	.0001	.0003	.0001
%RSD	.2079	3.650	.4590	.1373	7.571	1.221	.1991
#1	.4646	.0048	.8861	.3533	-.0008	.0268	.0434
#2	.4664	.0052	.8828	.3542	-.0009	.0263	.0432
#3	.4662	.0049	.8780	.3534	-.0010	.0269	.0434

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2530.9	7646.5	67021.	6619.3
Stddev	6.0	12.1	229.	77.5
%RSD	.23791	.15796	.34103	1.1715
#1	2528.0	7656.1	66759.	6534.1
#2	2537.8	7650.5	67132.	6685.9
#3	2526.9	7633.0	67174.	6637.9

Zoom In Zoom Out

Sample Name: MP30374-PS1 Acquired: 5/19/2016 15:10:38 Type: Unk
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0220	162.4	.0661	1.426	.0302	26.57	.0240	.0310	.1919	.0658
Stddev	.0001	1.9	.0008	.009	.0001	.06	.0001	.0001	.0001	.0005
%RSD	.2858	1.172	1.238	.5955	.2054	.2230	.2698	.2013	.0311	.8084
#1	.0219	164.2	.0665	1.422	.0302	26.55	.0241	.0310	.1919	.0663
#2	.0219	160.4	.0652	1.420	.0301	26.52	.0239	.0311	.1919	.0652
#3	.0221	162.7	.0667	1.435	.0302	26.63	.0240	.0310	.1920	.0659

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	57.37	6.042	6.800	.3375	.0453	7.322	.0970	.3942	.0456	.0443
Stddev	.18	.045	.014	.0014	.0002	.026	.0000	.0012	.0012	.0019
%RSD	.3112	.7430	.2056	.4136	.3927	.3543	.0224	.2993	2.662	4.339
#1	57.29	6.009	6.795	.3361	.0453	7.305	.0971	.3952	.0452	.0438
#2	57.25	6.024	6.789	.3389	.0451	7.310	.0971	.3929	.0470	.0426
#3	57.58	6.093	6.816	.3374	.0454	7.352	.0970	.3944	.0446	.0464

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.194	.0339	2.260	.9572	.0871	.0899	.2113
Stddev	.000	.0002	.023	.0030	.0013	.0002	.0002
%RSD	.0187	.5222	1.028	.3124	1.546	.2109	.0736
#1	1.194	.0341	2.282	.9607	.0858	.0900	.2112
#2	1.194	.0337	2.236	.9555	.0885	.0900	.2114
#3	1.195	.0338	2.263	.9555	.0869	.0897	.2114

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2314.3	12688.	109230.	11226.
Stddev	4.2	11.	547.	21.
%RSD	.18009	.09010	.50054	.18906
#1	2310.6	12679.	109720.	11205.
#2	2318.8	12685.	108640.	11248.
#3	2313.5	12701.	109320.	11223.

Zoom In Zoom Out

Sample Name: MP30374-S1 Acquired: 5/19/2016 15:14:53 Type: Unk
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0244	170.7	.9339	2.253	.0309	27.27	.0243	.2428	.2629	.1427
Stddev	.0002	1.6	.0015	.013	.0002	.08	.0000	.0002	.0010	.0005
%RSD	.9424	.9572	.1594	.5884	.6125	.2882	.2033	.0921	.3721	.3410
#1	.0245	172.6	.9355	2.268	.0311	27.30	.0242	.2429	.2635	.1433
#2	.0246	170.3	.9336	2.243	.0307	27.18	.0243	.2425	.2635	.1426
#3	.0242	169.4	.9325	2.248	.0310	27.32	.0243	.2429	.2618	.1423

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	66.84	13.71	16.66	.5638	.2164	14.30	.2875	.7958	.1177	.9173
Stddev	.13	.03	.03	.0013	.0001	.03	.0004	.0022	.0006	.0009
%RSD	.1984	.2046	.1521	.2321	.0690	.2138	.1545	.2771	.5477	.1007
#1	66.86	13.72	16.69	.5647	.2165	14.32	.2878	.7934	.1170	.9183
#2	66.70	13.68	16.65	.5645	.2163	14.27	.2870	.7976	.1182	.9167
#3	66.96	13.73	16.65	.5623	.2163	14.32	.2877	.7965	.1180	.9168

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.165	.2387	2.350	1.085	1.938	.2929	.3237
Stddev	.003	.0007	.030	.002	.004	.0005	.0006
%RSD	.2210	.2739	1.290	.1509	.1977	.1777	.1739
#1	1.167	.2393	2.382	1.086	1.934	.2933	.3236
#2	1.162	.2380	2.345	1.086	1.941	.2932	.3232
#3	1.164	.2389	2.322	1.083	1.939	.2923	.3244

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2285.9	12243.	104490.	10804.
Stddev	3.3	8.	468.	36.
%RSD	.14276	.06538	.44802	.33401
#1	2289.1	12236.	104210.	10773.
#2	2282.6	12251.	104220.	10797.
#3	2286.0	12241.	105030.	10844.

Zoom In Zoom Out

Sample Name: MP30374-S2 Acquired: 5/19/2016 15:19:17 Type: Unk
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0240	173.0	.9244	2.213	.0306	29.67	.0241	.2402	.2661	.1428
Stddev	.0001	.6	.0022	.029	.0001	.07	.0001	.0001	.0008	.0004
%RSD	.6066	.3462	.2365	1.317	.4623	.2332	.2552	.0388	.3184	.2788
#1	.0239	172.7	.9229	2.207	.0308	29.75	.0241	.2402	.2670	.1431
#2	.0242	173.7	.9235	2.244	.0305	29.66	.0241	.2402	.2655	.1429
#3	.0240	172.6	.9269	2.187	.0306	29.61	.0240	.2403	.2656	.1423

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	67.74	13.56	16.65	.5594	.2148	14.13	.2858	.9143	.1199	.9093
Stddev	.10	.01	.01	.0012	.0003	.02	.0002	.0017	.0006	.0011
%RSD	.1507	.1045	.0479	.2166	.1444	.1403	.0713	.1823	.4665	.1200
#1	67.84	13.56	16.64	.5608	.2146	14.15	.2856	.9162	.1192	.9103
#2	67.63	13.56	16.66	.5589	.2152	14.12	.2858	.9136	.1201	.9082
#3	67.75	13.54	16.65	.5585	.2148	14.11	.2860	.9132	.1203	.9095

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.294	.2359	2.347	1.141	1.928	.2943	.3315
Stddev	.001	.0006	.021	.003	.004	.0009	.0003
%RSD	.0769	.2504	.9099	.2225	.2127	.2968	.0765
#1	1.293	.2357	2.330	1.143	1.932	.2952	.3315
#2	1.293	.2355	2.371	1.138	1.924	.2934	.3318
#3	1.295	.2366	2.341	1.141	1.929	.2942	.3313

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2272.8	12243.	103740.	10853.
Stddev	2.4	6.	196.	23.
%RSD	.10666	.04925	.18930	.20935
#1	2270.0	12249.	103510.	10827.
#2	2274.7	12237.	103860.	10867.
#3	2273.6	12243.	103850.	10865.

Zoom In Zoom Out

Sample Name: FA34018-2 Acquired: 5/19/2016 15:23:40 Type: Unk
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0003	138.2	.0162	1.373	.0042	38.41	.0005	.0040	.1361	.0116
Stddev	.0001	.5	.0003	.004	.0000	.11	.0000	.0000	.0004	.0002
%RSD	50.23	.3802	1.597	.2948	1.014	.2829	4.351	.5770	.3049	1.322
#1	.0004	138.8	.0160	1.377	.0043	38.53	.0005	.0040	.1356	.0117
#2	.0001	137.8	.0164	1.369	.0042	38.37	.0005	.0040	.1362	.0114
#3	.0003	138.0	.0160	1.373	.0042	38.32	.0005	.0040	.1365	.0117

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	40.77	1.071	3.623	.4502	.0009	1.477	.0397	.3159	-.0007	.0005
Stddev	.14	.011	.016	.0008	.0000	.006	.0000	.0005	.0004	.0006
%RSD	.3435	.9979	.4398	.1805	2.806	.3850	.1172	.1463	48.08	135.2
#1	40.93	1.082	3.634	.4505	.0010	1.481	.0397	.3164	-.0003	.0011
#2	40.68	1.061	3.630	.4508	.0009	1.470	.0397	.3156	-.0010	-.0002
#3	40.70	1.071	3.604	.4493	.0010	1.479	.0396	.3157	-.0008	.0004

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.152	.0147	2.397	.6515	-.0077	.0482	.0896
Stddev	.002	.0002	.032	.0007	.0011	.0001	.0001
%RSD	.1667	1.248	1.333	.1117	14.85	.1744	.1301
#1	1.149	.0145	2.418	.6507	-.0086	.0481	.0897
#2	1.152	.0149	2.360	.6517	-.0082	.0483	.0895
#3	1.153	.0148	2.412	.6521	-.0064	.0481	.0897

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2342.3	13188.	114570.	11667.
Stddev	3.8	8.	163.	49.
%RSD	.16058	.06299	.14190	.41948
#1	2338.1	13196.	114620.	11610.
#2	2345.5	13189.	114390.	11697.
#3	2343.1	13179.	114700.	11693.

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: FA34018-3 Acquired: 5/19/2016 15:28:01 Type: Unk
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0027	142.2	.0207	1.893	.0052	52.61	.0053	.0071	.1922
Stddev	.0001	1.6	.0004	.022	.0000	.15	.0000	.0001	.0007
%RSD	4.813	1.149	1.784	1.183	.7906	.2918	.5126	.9370	.3444
#1	.0026	142.4	.0204	1.919	.0051	52.44	.0052	.0072	.1916
#2	.0028	140.5	.0211	1.882	.0052	52.67	.0053	.0070	.1921
#3	.0028	143.7	.0206	1.878	.0052	52.73	.0053	.0071	.1929

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)
Avg	.1793	55.13	1.676	4.922	1.064	.0060	1.763	.0510	F4.682
Stddev	.0004	.11	.014	.026	.003	.0000	.010	.0001	.002
%RSD	.2185	.1976	.8265	.5383	.3223	.4123	.5479	.1947	.0415
#1	.1798	55.01	1.662	4.926	1.060	.0060	1.755	.0510	4.680
#2	.1791	55.18	1.677	4.894	1.065	.0060	1.774	.0509	4.683
#3	.1791	55.21	1.690	4.946	1.066	.0060	1.759	.0511	4.682

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	.0016	.0019	1.213	.0980	2.101	.7369	-.0061	.0615	1.720
Stddev	.0005	.0012	.001	.0002	.024	.0007	.0007	.0001	.001
%RSD	29.39	66.74	.1094	.2133	1.156	.0909	11.05	.1938	.0460
#1	.0016	.0017	1.214	.0982	2.085	.7368	-.0063	.0614	1.721
#2	.0021	.0007	1.215	.0980	2.129	.7363	-.0053	.0616	1.721
#3	.0011	.0032	1.212	.0977	2.088	.7376	-.0066	.0616	1.719

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2336.5	11430.	99240.	10005.
Stddev	1.4	15.	414.	8.
%RSD	.05903	.12939	.41703	.07688
#1	2337.6	11431.	99713.	9997.8
#2	2335.0	11415.	98946.	10013.
#3	2337.0	11445.	99060.	10005.

Zoom In Zoom Out

Sample Name: FA34018-4 Acquired: 5/19/2016 15:32:24 Type: Unk
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0004	150.9	.0173	1.183	.0054	24.62	.0005	.0056	.1569	.0104
Stddev	.0001	2.8	.0002	.002	.0000	.02	.0000	.0001	.0005	.0001
%RSD	23.35	1.879	1.144	.1820	.3860	.0948	6.210	1.396	.2946	1.058
#1	.0004	149.6	.0171	1.181	.0053	24.64	.0004	.0056	.1565	.0104
#2	.0004	148.9	.0175	1.185	.0054	24.63	.0005	.0055	.1574	.0106
#3	.0003	154.1	.0173	1.185	.0054	24.59	.0005	.0056	.1569	.0104

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	51.33	1.174	4.167	.3925	.0008	1.855	.0471	.2720	-.0016	-.0001
Stddev	.02	.012	.006	.0005	.0000	.004	.0002	.0006	.0006	.0009
%RSD	.0366	1.006	.1499	.1357	4.787	.2267	.4686	.2046	38.41	1538.
#1	51.32	1.163	4.160	.3924	.0007	1.851	.0472	.2721	-.0023	.0009
#2	51.32	1.174	4.171	.3920	.0008	1.859	.0472	.2725	-.0016	-.0009
#3	51.35	1.187	4.171	.3931	.0007	1.856	.0468	.2714	-.0010	-.0001

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	1.131	.0118	2.053	.8364	-.0083	.0594	.0918
Stddev	.001	.0001	.066	.0027	.0001	.0002	.0001
%RSD	.1079	.7045	3.234	.3242	1.337	.3884	.1455
#1	1.132	.0119	2.053	.8342	-.0082	.0592	.0916
#2	1.130	.0118	1.986	.8394	-.0084	.0596	.0918
#3	1.132	.0117	2.119	.8357	-.0082	.0595	.0919

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2356.4	12159.	103330.	10413.
Stddev	5.0	16.	350.	61.
%RSD	.21265	.13202	.33850	.58385
#1	2362.1	12169.	103680.	10422.
#2	2354.0	12168.	103330.	10469.
#3	2353.0	12141.	102980.	10349.

Zoom In Zoom Out

Sample Name: FA34018-5 Acquired: 5/19/2016 15:36:45 Type: Unk
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0002	152.3	.0168	1.293	.0052	17.17	.0005	.0056	.1600	.0115
Stddev	.0001	1.5	.0003	.002	.0000	.05	.0000	.0000	.0003	.0001
%RSD	24.74	1.007	1.539	.1463	.5043	.2769	1.644	.4545	.1594	.5603
#1	.0003	154.0	.0165	1.291	.0052	17.22	.0005	.0056	.1603	.0115
#2	.0002	152.0	.0170	1.295	.0052	17.12	.0005	.0056	.1599	.0114
#3	.0003	150.9	.0169	1.293	.0053	17.18	.0005	.0055	.1598	.0116

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	50.00	1.557	4.166	.3746	.0009	2.254	.0454	.3518	-.0019	-.0008
Stddev	.14	.001	.024	.0008	.0000	.006	.0001	.0020	.0004	.0002
%RSD	.2734	.0783	.5718	.2119	1.995	.2723	.2563	.5573	21.19	29.22
#1	50.15	1.557	4.192	.3751	.0009	2.253	.0453	.3508	-.0021	-.0011
#2	49.88	1.555	4.146	.3750	.0009	2.249	.0455	.3541	-.0022	-.0007
#3	49.99	1.558	4.160	.3737	.0009	2.261	.0454	.3506	-.0015	-.0007

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	1.055	.0116	2.256	.8081	-.0085	.0580	.0952
Stddev	.002	.0002	.044	.0022	.0007	.0001	.0003
%RSD	.1436	1.314	1.958	.2723	8.303	.0915	.3430
#1	1.056	.0115	2.301	.8105	-.0079	.0580	.0949
#2	1.053	.0116	2.253	.8072	-.0093	.0579	.0955
#3	1.055	.0118	2.213	.8064	-.0084	.0580	.0952

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2354.6	13453.	112730.	11429.
Stddev	4.2	24.	469.	138.
%RSD	.17722	.17926	.41573	1.2112
#1	2358.2	13477.	112330.	11271.
#2	2350.0	13429.	112630.	11489.
#3	2355.5	13451.	113250.	11528.

Zoom In Zoom Out

Sample Name: FA34018-6 Acquired: 5/19/2016 15:41:04 Type: Unk
Method: 60102007_041712(v131) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0004	143.0	.0171	1.334	.0047	22.79	.0011	.0091	.1472	.0281
Stddev	.0002	2.9	.0003	.003	.0000	.06	.0000	.0001	.0002	.0002
%RSD	44.79	2.059	1.486	.2179	.5672	.2771	1.673	1.005	.1677	.7363
#1	.0004	143.5	.0173	1.332	.0047	22.86	.0011	.0090	.1471	.0283
#2	.0002	145.8	.0168	1.337	.0047	22.75	.0010	.0091	.1475	.0279
#3	.0005	139.9	.0173	1.334	.0047	22.75	.0011	.0092	.1471	.0281

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	46.87	1.490	3.946	.5451	.0009	1.790	.0436	.4801	-.0005	.0005
Stddev	.09	.010	.029	.0011	.0000	.004	.0002	.0016	.0004	.0011
%RSD	.1935	.6793	.7244	.2080	4.979	.2525	.4085	.3245	73.20	253.3
#1	46.97	1.480	3.979	.5443	.0009	1.793	.0437	.4806	-.0007	-.0004
#2	46.84	1.500	3.929	.5464	.0009	1.784	.0434	.4784	-.0008	.0000
#3	46.79	1.489	3.931	.5446	.0009	1.791	.0437	.4814	-.0001	.0017

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	1.352	.0234	2.184	.7447	-.0076	.0555	.2233
Stddev	.002	.0002	.016	.0008	.0007	.0001	.0002
%RSD	.1745	.9019	.7465	.1053	9.237	.1950	.1077
#1	1.354	.0232	2.203	.7456	-.0069	.0554	.2234
#2	1.349	.0233	2.176	.7441	-.0077	.0556	.2230
#3	1.352	.0236	2.174	.7444	-.0083	.0555	.2234

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2367.0	12547.	105390.	10706.
Stddev	.8	18.	132.	102.
%RSD	.03527	.14090	.12560	.95157
#1	2366.1	12527.	105540.	10589.
#2	2367.3	12559.	105370.	10770.
#3	2367.7	12556.	105270.	10760.

NOTE: The remaining raw data for this batch is not relevant to this job. As such it has been omitted.

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Ag 328.068 {103}	X	3	V	-0.009834	0.000000	No
			Fe	-0.000001	0.000000	No
			Mg	0.000002	0.000000	No
Al 396.152 { 85}	X	1	Mo	0.035224	0.000000	No
As 189.042 {478}	X	5	Fe	-0.000101	0.000000	No
			Cr	-0.000226	0.000000	No
			Mo	-0.000017	0.000000	No
			Al	0.000004	0.000000	No
			Ca	0.000002	0.000000	No
Ba 455.403 { 74}	X	1	Fe	0.000004	0.000000	No
Be 313.042 {108}	X	2	V	0.000115	0.000000	No
			Ti	-0.000059	0.000000	No
Ca 317.933 {106}	X	None				
Cd 226.502 {449}	X	4	Fe	0.000088	0.000000	No
			Ca	0.000001	0.000000	No
			Al	-0.000001	0.000000	No
			Ti	0.000151	0.000000	No
Co 228.616 {447}	X	3	Mo	-0.001220	0.000000	No
			Ti	0.003012	0.000000	No
			Fe	-0.000001	0.000000	No
Cr 267.716 {126}	X	3	Al	0.000005	0.000000	No
			Fe	-0.000018	0.000000	No
			Ca	0.000002	0.000000	No
Cu 324.754 {104}	X	10	Fe	-0.000184	0.000000	No
			Ca	0.000002	0.000000	No
			Mo	0.000528	0.000000	No
			Sn	-0.000012	0.000000	No
			V	-0.000158	0.000000	No
			Ti	-0.000251	0.000000	No
			Al	0.000004	0.000000	No
			Mg	0.000002	0.000000	No
			Co	-0.000787	0.000000	No
			Cd	0.000240	0.000000	No
Fe 259.940 {130}	X	None				
In 230.606 {446}*	X	None				
K 766.490 { 44}	X	None				
Mg 279.079 {121}	X	None				
Mn 257.610 {131}	X	2	Fe	0.000007	0.000000	No
			Mg	0.000001	0.000000	No
Mo 202.030 {467}	X	1	Fe	-0.000017	0.000000	No
Na 589.592 { 57}	X	None				
Ni 231.604 {445}	X	7	Fe	-0.000058	0.000000	No
			Co	-0.000054	0.000000	No
			Mo	0.000005	0.000000	No
			Sb	-0.000120	0.000000	No
			Al	0.000003	0.000000	No
			Be	-0.000269	0.000000	No
			Tl	0.000440	0.000000	No
Pb 220.353 {453}	X	9	Al	0.000294	0.000000	No
			Fe	-0.000008	0.000000	No
			Mo	-0.001012	0.000000	No
			Cu	0.001070	0.000000	No
			Ti	0.000036	0.000000	No
			Si	0.000071	0.000000	No
			Ca	-0.000001	0.000000	No
			Cr	0.000050	0.000000	No
			Mg	0.000004	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Sb 206.833 {463}	☒	10	Fe	-0.000002	0.000000	No
			Cr	0.012140	0.000000	No
			Mo	-0.004076	0.000000	No
			V	-0.000611	0.000000	No
			Sn	-0.010736	0.000000	No
			Ti	0.000040	0.000000	No
			Ca	-0.000001	0.000000	No
			Ni	-0.000438	0.000000	No
			Mg	-0.000002	0.000000	No
			Al	0.000003	0.000000	No
Se 196.090 {472}	☒	10	Fe	0.000010	0.000000	No
			Ca	-0.000001	0.000000	No
			Mn	0.000574	0.000000	No
			Mo	0.000111	0.000000	No
			Al	-0.000015	0.000000	No
			V	0.000000	0.000000	No
			Zn	0.000000	0.000000	No
			Sr	0.000137	0.000000	No
			As	-0.000032	0.000000	No
			Be	0.000212	0.000000	No
Si 212.412 {459}	☒	1	Mo	0.019120	0.000000	No
Sn 189.989 {477}	☒	None				
Sr 407.771 { 83}	☒	1	Ca	0.000017	0.000000	No
Ti 334.941 {101}	☒	1	Ca	-0.000007	0.000000	No
Tl 190.856 {477}	☒	11	Co	0.001145	0.000000	No
			Fe	0.000004	0.000000	No
			Al	-0.000011	0.000000	No
			Ba	-0.000051	0.000000	No
			Ti	-0.002651	0.000000	No
			Sb	0.000012	0.000000	No
			Ca	0.000003	0.000000	No
			Cr	0.000230	0.000000	No
			Mg	-0.000003	0.000000	No
			Mn	0.000818	0.000000	No
			V	-0.038621	0.000000	No
V 292.402 {115}	☒	5	Fe	0.000008	0.000000	No
			Cr	-0.002590	0.000000	No
			Mo	-0.005797	0.000000	No
			Ti	0.000364	0.000000	No
			Mn	-0.000693	0.000000	No
Y 224.306 {450}*	☒	None				
Y 360.073 { 94}*	☒	None				
Y 371.030 { 91}*	☒	None				
Zn 206.200 {463}	☒	5	Cr	-0.000965	0.000000	No
			Al	0.000005	0.000000	No
			Ca	0.000003	0.000000	No
			Fe	0.000006	0.000000	No
			As	0.001128	0.000000	No

	Element, Wavelength and Order	Date of Fit	Date of Cal.	Type of Fit	Weighting	A0	A1	A2	n (Exponent)
	Ag 328.068 {103}	5/19/2016 10:11:32	5/19/2016 10:11:32	Linear	1/Conc	-0.001295	0.603469	0.000000	1.000000
	Al 396.152 { 85}	5/19/2016 10:11:32	5/19/2016 10:11:32	Linear	1/Conc	0.000071	0.176859	0.000000	1.000000
	As 189.042 {478}	5/19/2016 10:11:32	5/19/2016 10:11:32	Linear	1/Conc	-0.000509	0.255334	0.000000	1.000000
	Ba 455.403 { 74}	5/19/2016 10:11:32	5/19/2016 10:11:32	Linear	1/Conc	0.011797	15.210030	0.000000	1.000000
	Be 313.042 {108}	5/19/2016 10:11:32	5/19/2016 10:11:32	Linear	1/Conc	0.000011	8.643978	0.000000	1.000000
	Ca 317.933 {106}	5/19/2016 10:11:32	5/19/2016 10:11:32	Linear	1/Conc	0.006299	0.256766	0.000000	1.000000
	Cd 226.502 {449}	5/19/2016 10:11:32	5/19/2016 10:11:32	Linear	1/Conc	-0.000503	5.336792	0.000000	1.000000
	Co 228.616 {447}	5/19/2016 10:11:32	5/19/2016 10:11:32	Linear	1/Conc	0.000054	2.610413	0.000000	1.000000
	Cr 267.716 {126}	5/19/2016 10:11:32	5/19/2016 10:11:32	Linear	1/Conc	0.000049	0.396825	0.000000	1.000000
	Cu 324.754 {104}	5/19/2016 10:11:32	5/19/2016 10:11:32	Linear	1/Conc	0.004395	0.707743	0.000000	1.000000
	Fe 259.940 {130}	5/19/2016 10:11:32	5/19/2016 10:11:32	Linear	1/Conc	0.001094	0.137280	0.000000	1.000000
	In 230.606 {446}*	5/19/2016 9:44:14	5/5/2010 12:30:54	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	K 766.490 { 44}	5/19/2016 10:11:32	5/19/2016 10:11:32	Linear	1/Conc	-0.007034	0.156339	0.000000	1.000000
	Mg 279.079 {121}	5/19/2016 10:11:32	5/19/2016 10:11:32	Linear	1/Conc	-0.000247	0.024814	0.000000	1.000000
	Mn 257.610 {131}	5/19/2016 10:11:32	5/19/2016 10:11:32	Linear	1/Conc	0.000242	2.794418	0.000000	1.000000
	Mo 202.030 {467}	5/19/2016 10:11:32	5/19/2016 10:11:32	Linear	1/Conc	0.000407	1.307311	0.000000	1.000000
	Na 589.592 { 57}	5/19/2016 10:11:32	5/19/2016 10:11:32	Linear	1/Conc	-0.007220	0.441042	0.000000	1.000000
	Ni 231.604 {445}	5/19/2016 10:11:32	5/19/2016 10:11:32	Linear	1/Conc	0.000099	1.721935	0.000000	1.000000
	Pb 220.353 {453}	5/19/2016 10:11:32	5/19/2016 10:11:32	Linear	1/Conc	-0.001088	1.231977	0.000000	1.000000
	Sb 206.833 {463}	5/19/2016 10:11:32	5/19/2016 10:11:32	Linear	1/Conc	0.000887	0.279809	0.000000	1.000000
	Se 196.090 {472}	5/19/2016 10:11:32	5/19/2016 10:11:32	Linear	1/Conc	0.000275	0.179293	0.000000	1.000000
	Si 212.412 {459}	5/19/2016 10:11:32	5/19/2016 10:11:32	Linear	1/Conc	0.004989	0.465506	0.000000	1.000000
	Sn 189.989 {477}	5/19/2016 10:11:32	5/19/2016 10:11:32	Linear	1/Conc	0.000185	0.570838	0.000000	1.000000
	Sr 407.771 { 83}	5/19/2016 10:11:32	5/19/2016 10:11:32	Linear	1/Conc	0.002038	19.641149	0.000000	1.000000
	Ti 334.941 {101}	5/19/2016 10:11:32	5/19/2016 10:11:32	Linear	1/Conc	0.001429	1.407773	0.000000	1.000000
	Tl 190.856 {477}	5/19/2016 10:11:32	5/19/2016 10:11:32	Linear	1/Conc	-0.004942	0.578852	0.000000	1.000000
	V 292.402 {115}	5/19/2016 10:11:32	5/19/2016 10:11:32	Linear	1/Conc	-0.000171	0.668384	0.000000	1.000000
	Y 224.306 {450}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	Y 360.073 { 94}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	Y 371.030 { 91}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	Zn 206.200 {463}	5/19/2016 10:11:32	5/19/2016 10:11:32	Linear	1/Conc	0.001584	3.251662	0.000000	1.000000

	Element, Wavelength and Order	Correlation	Std Error of Est	Predicted MDL	Predicted MQL	Status	Reslope		QC Norm	
							Slope	Y-int	Slope factor	Offset
	Ag 328.068 {103}	0.999964	0.000047	0.000351	0.001169	OK.	1.000000	0.000000	1	0
	Al 396.152 { 85}	0.999911	0.003808	0.009187	0.030622	OK.	1.000000	0.000000	1	0
	As 189.042 {478}	0.999931	0.000241	0.000613	0.002045	OK.	1.000000	0.000000	1	0
	Ba 455.403 { 74}	0.999974	0.008895	0.000153	0.000511	OK.	1.000000	0.000000	1	0
	Be 313.042 {108}	0.999951	0.006882	0.000071	0.000235	OK.	1.000000	0.000000	1	0
	Ca 317.933 {106}	0.999882	0.006363	0.002885	0.009618	OK.	1.000000	0.000000	1	0
	Cd 226.502 {449}	0.999952	0.004225	0.000044	0.000147	OK.	1.000000	0.000000	1	0
	Co 228.616 {447}	0.999971	0.001602	0.000097	0.000322	OK.	1.000000	0.000000	1	0
	Cr 267.716 {126}	0.999764	0.000695	0.000297	0.000992	OK.	1.000000	0.000000	1	0
	Cu 324.754 {104}	0.999909	0.000765	0.000250	0.000833	OK.	1.000000	0.000000	1	0
	Fe 259.940 {130}	0.999344	0.008013	0.002544	0.008479	OK.	1.000000	0.000000	1	0
	In 230.606 {446}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	K 766.490 { 44}	0.999911	0.003369	0.021733	0.072444	OK.	1.000000	0.000000	1	0
	Mg 279.079 {121}	0.999904	0.000553	0.018285	0.060949	OK.	1.000000	0.000000	1	0
	Mn 257.610 {131}	0.999662	0.005858	0.000039	0.000131	OK.	1.000000	0.000000	1	0
	Mo 202.030 {467}	0.999987	0.000542	0.000118	0.000394	OK.	1.000000	0.000000	1	0
	Na 589.592 { 57}	0.999875	0.011239	0.007466	0.024886	OK.	1.000000	0.000000	1	0
	Ni 231.604 {445}	0.999970	0.001067	0.000147	0.000489	OK.	1.000000	0.000000	1	0
	Pb 220.353 {453}	0.999895	0.001444	0.000488	0.001626	OK.	1.000000	0.000000	1	0
	Sb 206.833 {463}	0.999951	0.000222	0.000878	0.002927	OK.	1.000000	0.000000	1	0
	Se 196.090 {472}	0.999961	0.000127	0.001318	0.004393	OK.	1.000000	0.000000	1	0
	Si 212.412 {459}	0.999690	0.000952	0.000379	0.001263	OK.	1.000000	0.000000	1	0
	Sn 189.989 {477}	0.999897	0.000659	0.000229	0.000762	OK.	1.000000	0.000000	1	0
	Sr 407.771 { 83}	0.999865	0.026031	0.000070	0.000233	OK.	1.000000	0.000000	1	0
	Ti 334.941 {101}	0.999535	0.003458	0.000119	0.000398	OK.	1.000000	0.000000	1	0
	Tl 190.856 {477}	0.999976	0.000308	0.000667	0.002223	OK.	1.000000	0.000000	1	0
	V 292.402 {115}	0.999825	0.000998	0.000230	0.000766	OK.	1.000000	0.000000	1	0
	Y 224.306 {450}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Y 360.073 { 94}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Y 371.030 { 91}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Zn 206.200 {463}	0.999956	0.002466	0.000053	0.000177	OK.	1.000000	0.000000	1	0

Zoom In ▶ Zoom Out

Sample Name: Blank Acquired: 5/20/2016 8:53:21 Type: Cal
Method: 60102007_042011(v120) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.0002**	**.0044**	**-.0007**	**.0070**	**.0045**	**.0072**	**-.0009**	**-.0004**	**-.0002**
Stddev	.0000	.0011	.0000	.0026	.0009	.0012	.0005	.0001	.0000
%RSD	20.63	25.33	3.518	37.23	19.63	17.01	50.99	34.18	7.965
#1	-.0003	.0055	-.0007	.0096	.0054	.0086	-.0006	-.0004	-.0002
#2	-.0002	.0045	-.0007	.0044	.0043	.0067	-.0007	-.0003	-.0002
#3	-.0002	.0033	-.0006	.0070	.0037	.0064	-.0014	-.0005	-.0002

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0069**	**.0034**	**-.0059**	**.0005**	**.0010**	**.0024**	**-.0158**	**-.0005**	**.0005**
Stddev	.0002	.0004	.0009	.0005	.0000	.0003	.0047	.0002	.0004
%RSD	3.157	12.61	15.14	98.09	4.763	13.10	29.98	41.12	74.15
#1	.0068	.0039	-.0054	.0006	.0010	.0027	-.0103	-.0003	.0001
#2	.0072	.0034	-.0054	-.0001	.0010	.0024	-.0183	-.0006	.0007
#3	.0067	.0030	-.0069	.0008	.0009	.0021	-.0187	-.0007	.0007

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0011**	**-.0001**	**.0048**	**.0006**	**.0072**	**.0030**	**-.0015**	**-.0007**	**.0006**
Stddev	.0001	.0001	.0006	.0000	.0017	.0003	.0002	.0000	.0002
%RSD	8.599	85.85	13.48	.8645	24.26	9.813	16.43	7.386	43.90
#1	.0010	-.0002	.0045	.0006	.0092	.0033	-.0012	-.0006	.0008
#2	.0012	.0000	.0044	.0006	.0060	.0031	-.0015	-.0007	.0006
#3	.0011	-.0002	.0056	.0006	.0064	.0027	-.0017	-.0007	.0003

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2648.6**	**4886.5**	**39688.**	**3604.6**
Stddev	4	11.3	216.	14.7
%RSD	.01560	.23138	.54455	.40852
#1	2648.5	4885.4	39441.	3603.2
#2	2648.2	4875.7	39843.	3590.6
#3	2649.0	4898.3	39779.	3620.0

◀ Zoom In ▶ Zoom Out

Sample Name: LowStd Acquired: 5/20/2016 8:57:34 Type: Cal
Method: 60102007_042011(v120) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0363**	**2.240**	**.0873**	**4.620**	**5.481**	**2.313**	**2.321**	**1.315**	**.2675**
Stddev	.0004	.003	.0003	.015	.020	.008	.003	.001	.0013
%RSD	1.020	.1245	.3645	.3343	.3628	.3565	.1245	.0634	.4892
#1	.0359	2.241	.0872	4.622	5.499	2.318	2.324	1.316	.2675
#2	.0365	2.236	.0871	4.635	5.459	2.304	2.319	1.315	.2688
#3	.0364	2.242	.0877	4.604	5.483	2.319	2.319	1.315	.2662

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.4766**	**1.713**	**.9782**	**.2374**	**1.479**	**.5940**	**4.140**	**.7756**	**.3893**
Stddev	.0019	.007	.0058	.0021	.008	.0005	.015	.0016	.0023
%RSD	.4064	.4338	.5963	.8888	.5551	.0763	.3530	.2037	.5980
#1	.4765	1.718	.9848	.2392	1.478	.5934	4.156	.7773	.3876
#2	.4786	1.705	.9738	.2351	1.487	.5942	4.128	.7743	.3884
#3	.4747	1.717	.9760	.2378	1.471	.5942	4.135	.7750	.3919

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.1285**	**.0642**	**.2067**	**.2111**	**8.564**	**1.060**	**.1452**	**.3598**	**1.143**
Stddev	.0006	.0002	.0023	.0000	.029	.004	.0005	.0010	.001
%RSD	.4806	.2370	1.097	.0112	.3436	.3733	.3659	.2686	.1057
#1	.1292	.0642	.2056	.2111	8.595	1.060	.1447	.3604	1.144
#2	.1281	.0643	.2093	.2111	8.562	1.065	.1452	.3602	1.144
#3	.1283	.0640	.2052	.2111	8.536	1.057	.1458	.3587	1.142

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2465.9**	**4806.2**	**38629.**	**3575.3**
Stddev	3.8	9.6	168.	38.3
%RSD	.15446	.20075	.43401	1.0700
#1	2467.4	4796.5	38527.	3561.9
#2	2468.8	4815.8	38538.	3618.5
#3	2461.6	4806.4	38823.	3545.6

◀ Zoom In ▶ Zoom Out

Sample Name: MidStd Acquired: 5/20/2016 9:02:05 Type: Cal
Method: 60102007_042011(v120) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.1447**	**9.651**	**.3691**	**19.20**	**22.63**	**9.843**	**9.481**	**5.309**	**1.074**
Stddev	.0012	.027	.0005	.00	.12	.043	.007	.003	.004
%RSD	.8145	.2758	.1429	.0219	.5424	.4361	.0748	.0582	.3295
#1	.1447	9.681	.3692	19.20	22.77	9.890	9.484	5.307	1.072
#2	.1436	9.641	.3686	19.21	22.58	9.834	9.473	5.308	1.072
#3	.1459	9.631	.3696	19.20	22.55	9.806	9.486	5.313	1.078

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1.931**	**6.873**	**4.255**	**1.019**	**5.994**	**2.403**	**17.94**	**3.121**	**1.641**
Stddev	.005	.028	.002	.005	.012	.003	.07	.002	.003
%RSD	.2701	.4105	.0351	.4501	.1917	.1244	.3900	.0618	.1854
#1	1.937	6.903	4.257	1.024	5.982	2.402	18.02	3.121	1.638
#2	1.928	6.869	4.254	1.018	5.995	2.401	17.90	3.120	1.644
#3	1.928	6.847	4.255	1.015	6.005	2.406	17.91	3.123	1.642

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.5289**	**.2690**	**.8843**	**.8385**	**34.79**	**4.285**	**.6026**	**1.448**	**4.644**
Stddev	.0014	.0002	.0011	.0002	.07	.002	.0012	.002	.006
%RSD	.2614	.0740	.1227	.0246	.2071	.0559	.2027	.1407	.1208
#1	.5279	.2689	.8850	.8386	34.83	4.283	.6012	1.449	4.647
#2	.5282	.2689	.8831	.8386	34.71	4.288	.6032	1.446	4.647
#3	.5304	.2692	.8848	.8382	34.84	4.285	.6035	1.449	4.638

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2238.5**	**4626.8**	**37473.**	**3513.8**
Stddev	5.3	4.0	130.	27.4
%RSD	.23877	.08653	.34791	.77902
#1	2239.9	4623.6	37519.	3486.6
#2	2232.6	4625.6	37574.	3513.5
#3	2243.0	4631.3	37326.	3541.4

◀ Zoom In ▶ Zoom Out

Sample Name: HighStd Acquired: 5/20/2016 9:06:07 Type: Cal
Method: 60102007_042011(v120) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.2899**	**19.09**	**.7407**	**38.33**	**44.53**	**19.26**	**18.52**	**10.41**	**2.094**
Stddev	.0011	.15	.0003	.18	.43	.22	.04	.02	.004
%RSD	.3665	.7831	.0449	.4650	.9588	1.145	.1931	.1637	.1757
#1	.2901	19.05	.7411	38.31	44.23	19.12	18.55	10.43	2.090
#2	.2908	18.96	.7404	38.16	44.34	19.15	18.48	10.39	2.095
#3	.2888	19.25	.7407	38.51	45.02	19.51	18.53	10.42	2.097

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3.834**	**12.76**	**8.441**	**2.005**	**11.43**	**4.712**	**35.63**	**6.085**	**3.320**
Stddev	.009	.13	.050	.023	.03	.006	.26	.009	.004
%RSD	.2362	1.014	.5907	1.169	.2284	.1363	.7384	.1446	.1075
#1	3.843	12.69	8.422	1.988	11.42	4.715	35.58	6.086	3.318
#2	3.833	12.69	8.403	1.995	11.41	4.704	35.40	6.076	3.317
#3	3.825	12.91	8.497	2.032	11.46	4.716	35.92	6.094	3.324

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1.059**	**.5369**	**1.680**	**1.620**	**67.24**	**8.210**	**1.198**	**2.828**	**9.120**
Stddev	.002	.0002	.003	.003	1.47	.037	.002	.005	.037
%RSD	.1609	.0281	.1662	.1617	2.182	.4568	.1668	.1903	.4080
#1	1.057	.5370	1.677	1.621	67.02	8.173	1.195	2.823	9.158
#2	1.059	.5368	1.682	1.617	65.90	8.248	1.199	2.833	9.084
#3	1.061	.5368	1.681	1.621	68.81	8.208	1.199	2.828	9.119

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2065.3**	**4451.6**	**36461.**	**3469.9**
Stddev	2.2	1.3	86.	53.3
%RSD	.10526	.02837	.23667	1.5348
#1	2067.6	4453.0	36557.	3498.8
#2	2063.2	4451.2	36389.	3502.6
#3	2065.2	4450.5	36436.	3408.5

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Zoom In Zoom Out

Sample Name: HSTD Acquired: 5/20/2016 9:10:47 Type: QC
Method: 60102007_042011(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5029**	**80.77**	**4.047**	**4.036**	**4.024**	**80.75**	**3.999**	**3.993**	**3.966**
Stddev	.0035	.19	.025	.007	.006	.21	.012	.010	.023
%RSD	.7057	.2371	.6284	.1684	.1469	.2646	.2929	.2449	.5708
#1	.5047	80.98	4.073	4.044	4.027	80.72	4.010	4.003	3.991
#2	.5052	80.74	4.045	4.032	4.029	80.98	3.999	3.994	3.946
#3	.4988	80.60	4.022	4.032	4.018	80.55	3.987	3.983	3.962
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.988**	**78.47**	**80.82**	**80.90**	**3.951**	**3.997**	**81.05**	**3.996**	**4.046**
Stddev	.021	.19	.10	.41	.023	.007	.17	.018	.012
%RSD	.5321	.2407	.1252	.5058	.5804	.1756	.2160	.4389	.3007
#1	3.992	78.63	80.93	80.82	3.974	4.002	81.12	4.014	4.060
#2	4.007	78.51	80.78	81.35	3.929	4.000	81.19	3.995	4.039
#3	3.965	78.26	80.73	80.54	3.949	3.989	80.86	3.979	4.039
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.043**	**4.031**	**3.971**	**3.956**	**4.037**	**3.964**	**4.002**	**3.990**	**3.989**
Stddev	.018	.015	.014	.013	.014	.015	.009	.015	.004
%RSD	.4475	.3770	.3564	.3248	.3367	.3813	.2288	.3782	.1125
#1	4.063	4.047	3.984	3.968	4.052	3.979	4.012	4.004	3.994
#2	4.039	4.029	3.975	3.957	4.026	3.949	3.994	3.974	3.988
#3	4.027	4.016	3.956	3.942	4.033	3.962	4.000	3.993	3.986
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

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Zoom In Zoom Out

Sample Name: HSTD Acquired: 5/20/2016 9:10:47 Type: QC
Method: 60102007_042011(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2051.3**	**4409.3**	**36259.**	**3409.5**
Stddev	1.5	9.9	229.	20.9
%RSD	.07549	.22510	.63209	.61206
#1	2053.1	4409.9	35995.	3403.3
#2	2050.6	4399.1	36405.	3392.5
#3	2050.2	4418.9	36377.	3432.8

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Zoom In Zoom Out

Sample Name: ICV Acquired: 5/20/2016 9:17:15 Type: QC
Method: 60102007_042011(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2493**	**42.20**	**2.040**	**2.122**	**2.121**	**42.97**	**2.066**	**2.083**	**2.087**
Stddev	.0006	.14	.002	.005	.011	.04	.001	.002	.008
%RSD	.2227	.3231	.1086	.2501	.5308	.0814	.0503	.0737	.3998
#1	.2498	42.09	2.041	2.122	2.123	42.93	2.066	2.084	2.093
#2	.2487	42.36	2.037	2.128	2.130	42.99	2.065	2.081	2.078
#3	.2493	42.17	2.041	2.117	2.108	43.00	2.066	2.083	2.091
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.043**	**41.85**	**42.73**	**43.54**	**2.140**	**1.931**	**43.06**	**2.093**	**2.043**
Stddev	.005	.06	.15	.10	.010	.001	.17	.002	.005
%RSD	.2631	.1319	.3621	.2362	.4714	.0669	.4012	.1142	.2354
#1	2.049	41.83	42.73	43.62	2.144	1.931	43.09	2.095	2.040
#2	2.038	41.92	42.89	43.57	2.128	1.933	43.21	2.091	2.049
#3	2.041	41.82	42.58	43.42	2.147	1.930	42.87	2.094	2.041
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.061**	**2.080**	**.1145**	**2.052**	**2.002**	**1.999**	**2.118**	**1.931**	**2.085**
Stddev	.003	.006	.0010	.002	.003	.009	.004	.008	.004
%RSD	.1303	.2854	.8578	.1070	.1697	.4327	.2018	.4193	.1758
#1	2.064	2.083	.1155	2.054	2.000	2.003	2.118	1.937	2.087
#2	2.060	2.073	.1144	2.050	2.006	1.989	2.123	1.922	2.081
#3	2.058	2.083	.1136	2.052	2.001	2.005	2.114	1.933	2.087
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

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Zoom In Zoom Out

Sample Name: ICV Acquired: 5/20/2016 9:17:15 Type: QC
Method: 60102007_042011(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2203.1**	**4541.4**	**36633.**	**3417.2**
Stddev	3.5	4.6	130.	11.7
%RSD	.16010	.10079	.35414	.34155
#1	2205.4	4538.0	36546.	3412.2
#2	2199.0	4539.7	36782.	3430.5
#3	2204.9	4546.6	36571.	3408.8

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7.4

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SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: ICB Acquired: 5/20/2016 9:24:32 Type: QC
Method: 60102007_042011(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	-.0103	-.0007	.0000	.0001	-.0011	.0000	.0000	.0000
Stddev	.0002	.0046	.0008	.000	.0001	.0008	.0001	.000	.000
%RSD	104.6	44.93	109.2	1666.	84.46	72.46	376.7	856.5	4358.
#1	.0004	-.0116	-.0016	-.0002	.0000	-.0002	.0001	-.0001	.0001
#2	.0000	-.0141	-.0005	.0004	.0002	-.0013	.0001	.0001	-.0001
#3	.0001	-.0051	-.0001	-.0003	.0001	-.0018	-.0001	.0000	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	-.0036	-.0232	-.0231	.0000	-.0002	.0062	.0000	-.0003
Stddev	.000	.0018	.0234	.0059	.0000	.0003	.0083	.0001	.0002
%RSD	1741.	51.51	101.2	25.67	102.0	138.6	133.7	262.6	77.04
#1	.0002	-.0034	-.0411	-.0263	.0001	.0000	.0049	.0001	-.0006
#2	.0000	-.0018	-.0317	-.0267	.0000	-.0001	.0151	.0000	-.0001
#3	-.0002	-.0055	.0033	-.0162	.0000	-.0005	-.0014	-.0001	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0007	.0009	-.0005	.0001	-.0001	-.0002	-.0009	.0000	-.0001
Stddev	.0003	.0017	.0001	.0001	.0001	.0000	.0005	.000	.0001
%RSD	45.20	190.3	18.18	126.0	79.61	18.87	51.63	345.9	66.41
#1	-.0009	-.0004	-.0004	.0002	.0000	-.0001	-.0004	.0001	.0000
#2	-.0010	.0003	-.0006	.0000	-.0001	-.0001	-.0010	-.0002	-.0001
#3	-.0004	.0028	-.0005	.0000	-.0001	-.0002	-.0014	.0000	-.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: ICB Acquired: 5/20/2016 9:24:32 Type: QC
Method: 60102007_042011(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2605.4	4825.6	39266.	3560.1
Stddev	3.4	14.1	184.	36.3
%RSD	.13237	.29291	.46843	1.0200
#1	2604.8	4824.3	39217.	3518.4
#2	2602.3	4812.1	39111.	3576.5
#3	2609.1	4840.3	39469.	3585.3

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/20/2016 9:34:10 Type: QC
Method: 60102007_042011(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0092	.2020	.0098	.2075	.0050	1.064	.0055	.0552	.0109
Stddev	.0003	.0077	.0003	.0016	.0000	.011	.0000	.0001	.0003
%RSD	2.938	3.814	3.043	.7623	.7270	1.020	.3499	.1931	2.528
#1	.0094	.1936	.0101	.2058	.0050	1.052	.0055	.0553	.0109
#2	.0093	.2036	.0099	.2089	.0050	1.074	.0055	.0551	.0106
#3	.0089	.2087	.0095	.2077	.0049	1.065	.0055	.0552	.0112
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0273	.3000	10.42	5.356	.0168	.0496	10.51	.0449	.0046
Stddev	.0004	.0032	.10	.059	.0001	.0001	.03	.0001	.0004
%RSD	1.295	1.078	.9656	1.107	.5505	.2982	.3210	.2145	7.830
#1	.0270	.3034	10.34	5.294	.0168	.0496	10.47	.0450	.0042
#2	.0271	.2969	10.53	5.412	.0168	.0498	10.54	.0450	.0048
#3	.0277	.2998	10.38	5.362	.0167	.0495	10.53	.0448	.0048
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0041	.0099	.1139	.0544	.0099	.0098	.0102	.0507	.0224
Stddev	.0008	.0010	.0008	.0001	.0002	.0001	.0004	.0002	.0001
%RSD	19.62	10.30	.7046	.1524	1.647	.7450	3.858	.4439	.4111
#1	.0034	.0109	.1148	.0543	.0097	.0098	.0101	.0504	.0224
#2	.0039	.0101	.1136	.0544	.0100	.0099	.0098	.0508	.0225
#3	.0050	.0088	.1133	.0544	.0099	.0097	.0106	.0507	.0224
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/20/2016 9:34:10 Type: QC
Method: 60102007_042011(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2473.3	4732.1	37910.	3489.3
Stddev	6.2	7.1	23.	43.9
%RSD	.25170	.14960	.06059	1.2589
#1	2476.8	4740.2	37911.	3533.5
#2	2477.0	4727.3	37886.	3445.6
#3	2466.1	4728.7	37932.	3488.8

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/20/2016 9:42:25 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**523.8**	**-.0012**	**-.0005**	**-.0003**	**503.0**	**.0004**	**-.0003**	**-.0010**
Stddev	.0001	4.4	.0012	.0003	.0000	2.2	.0001	.0002	.0001
%RSD	13.76	.8483	106.2	73.31	9.600	.4356	16.51	57.01	11.99
#1	.0005	519.1	.0001	-.0005	-.0004	504.6	.0003	-.0004	-.0011
#2	.0004	524.4	-.0012	-.0001	-.0003	500.5	.0004	-.0004	-.0009
#3	.0004	527.9	-.0024	-.0008	-.0003	503.9	.0005	-.0001	-.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**188.6**	**.0481**	**551.3**	**-.0001**	**.0002**	**.1553**	**.0003**	**-.0006**
Stddev	.000	.5	.0243	1.7	.0000	.0001	.0115	.0002	.0008
%RSD	1161.	.2782	50.43	.3102	18.35	47.36	7.394	67.45	127.1
#1	.0003	189.2	.0656	553.2	-.0001	.0001	.1447	.0005	-.0004
#2	-.0003	188.5	.0583	551.0	-.0001	.0003	.1537	.0001	-.0016
#3	.0000	188.1	.0204	549.8	-.0001	.0002	.1675	.0003	.0000
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0015**	**.0019**	**.0110**	F **.0016**	**-.0004**	**-.0005**	**.0005**	**.0001**	**-.0011**
Stddev	.0018	.0007	.0005	.0008	.0001	.0001	.0016	.0002	.0001
%RSD	119.6	38.96	4.421	48.96	25.16	12.89	349.0	448.0	13.37
#1	-.0019	.0014	.0114	.0008	-.0004	-.0005	-.0010	.0003	-.0009
#2	.0005	.0027	.0112	.0024	-.0003	-.0005	.0002	.0001	-.0012
#3	-.0031	.0015	.0105	.0016	-.0004	-.0004	.0021	-.0002	-.0011
Check ?	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.0010					
Low Limit				-.0010					

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/20/2016 9:42:25 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1955.2**	**4229.6**	**32703.**	**3199.9**
Stddev	1.0	14.5	132.	7.5
%RSD	.04971	.34400	.40324	.23441
#1	1954.2	4213.5	32758.	3191.4
#2	1955.1	4241.9	32553.	3202.6
#3	1956.2	4233.3	32799.	3205.7

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 5/20/2016 9:47:29 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.047**	**497.9**	**1.128**	**.5284**	**.5298**	**493.4**	**1.018**	**.4983**	**.5420**
Stddev	.002	1.8	.003	.0026	.0044	3.8	.003	.0010	.0031
%RSD	.1593	.3564	.2937	.5000	.8274	.7780	.3204	.2062	.5766
#1	1.048	499.3	1.125	.5288	.5322	496.6	1.016	.4973	.5384
#2	1.045	498.5	1.129	.5308	.5324	494.4	1.022	.4993	.5441
#3	1.048	495.9	1.131	.5256	.5247	489.1	1.016	.4983	.5435
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5422**	**187.5**	**.0014**	**537.4**	**.5407**	**.9510**	**.1659**	**1.011**	**1.016**
Stddev	.0020	1.1	.0193	2.8	.0019	.0014	.0151	.002	.003
%RSD	.3749	.5718	1387.	.5194	.3505	.1452	9.117	.2264	.3128
#1	.5436	188.3	.0044	539.5	.5385	.9494	.1779	1.009	1.014
#2	.5399	187.9	.0190	538.5	.5419	.9518	.1489	1.013	1.020
#3	.5432	186.3	-.0193	534.3	.5416	.9518	.1710	1.011	1.015
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.037**	**1.046**	**.0815**	**.9444**	**1.018**	**1.031**	**.9729**	**.4929**	**1.020**
Stddev	.004	.009	.0013	.0018	.005	.002	.0013	.0014	.004
%RSD	.4296	.9111	1.608	.1859	.4754	.1636	.1350	.2897	.4225
#1	1.032	1.037	.0801	.9436	1.022	1.030	.9717	.4912	1.020
#2	1.039	1.046	.0817	.9464	1.019	1.032	.9743	.4935	1.024
#3	1.040	1.056	.0826	.9432	1.013	1.033	.9728	.4938	1.016
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 5/20/2016 9:47:29 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1940.4**	**4225.4**	**33270.**	**3271.3**
Stddev	4.7	10.0	176.	22.2
%RSD	.24082	.23775	.52873	.67883
#1	1944.9	4237.0	33448.	3248.0
#2	1935.6	4219.0	33096.	3273.6
#3	1940.5	4220.2	33265.	3292.2

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/20/2016 9:54:14 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2482**	**39.93**	**2.038**	**1.971**	**2.012**	**40.04**	**2.057**	**2.033**	**2.036**
Stddev	.0004	.15	.006	.011	.009	.19	.005	.004	.011
%RSD	.1507	.3821	.3061	.5539	.4282	.4719	.2586	.2126	.5622
#1	.2479	39.93	2.033	1.967	2.010	40.13	2.056	2.031	2.047
#2	.2482	40.08	2.035	1.983	2.022	40.16	2.052	2.030	2.037
#3	.2486	39.78	2.045	1.962	2.005	39.82	2.062	2.038	2.024
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.984**	**41.71**	**39.72**	**40.05**	**2.089**	**2.036**	**40.36**	**2.064**	**2.011**
Stddev	.003	.21	.11	.16	.009	.004	.15	.005	.007
%RSD	.1703	.5111	.2725	.4058	.4168	.2197	.3632	.2251	.3434
#1	1.988	41.81	39.79	40.20	2.099	2.034	40.32	2.062	2.011
#2	1.981	41.85	39.78	40.06	2.087	2.032	40.53	2.060	2.004
#3	1.985	41.46	39.60	39.88	2.082	2.041	40.24	2.069	2.018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.033**	**2.029**	**2.106**	**2.041**	**2.004**	**2.082**	**2.035**	**2.056**	**2.026**
Stddev	.001	.006	.002	.003	.010	.005	.008	.004	.006
%RSD	.0641	.2913	.0754	.1531	.4884	.2336	.3903	.2191	.3217
#1	2.034	2.026	2.108	2.038	2.001	2.088	2.042	2.060	2.024
#2	2.031	2.026	2.105	2.041	2.015	2.081	2.026	2.056	2.021
#3	2.033	2.036	2.105	2.045	1.996	2.079	2.036	2.051	2.034
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/20/2016 9:54:14 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2241.6**	**4599.6**	**37386.**	**3507.9**
Stddev	4.0	6.5	187.	19.4
%RSD	.17781	.14165	.50117	.55435
#1	2240.7	4595.1	37171.	3488.2
#2	2246.0	4607.1	37476.	3508.6
#3	2238.2	4596.7	37512.	3527.1

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/20/2016 10:00:08 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**-.0060**	**-.0002**	**-.0003**	**-.0002**	**.0037**	**.0000**	**.0000**	**-.0001**
Stddev	.0001	.0037	.0004	.0002	.0000	.0011	.000	.0001	.0002
%RSD	83.62	60.89	165.6	43.85	12.17	29.92	525.7	13000.	264.6
#1	-.0001	-.0093	-.0002	-.0002	-.0002	.0024	.0000	.0001	.0001
#2	.0000	-.0020	-.0007	-.0005	-.0003	.0041	.0000	.0000	-.0001
#3	-.0001	-.0068	.0001	-.0003	-.0002	.0045	.0000	-.0001	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**-.0012**	**-.0463**	**-.0379**	**.0000**	**-.0005**	**.0195**	**.0001**	**-.0006**
Stddev	.0001	.0026	.0050	.0034	.000	.0002	.0131	.0002	.0001
%RSD	66.62	210.4	10.81	9.015	44.22	46.21	67.40	263.5	11.89
#1	.0000	.0017	-.0445	-.0356	.0000	-.0003	.0322	-.0002	-.0005
#2	.0003	-.0024	-.0519	-.0418	-.0001	-.0005	.0201	.0001	-.0006
#3	.0002	-.0030	-.0424	-.0363	.0000	-.0007	.0060	.0003	-.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0000**	**.0005**	**.0000**	**-.0003**	**-.0003**	**-.0005**	**.0000**	**.0002**
Stddev	.0007	.002	.0003	.000	.0001	.0001	.0004	.000	.0001
%RSD	376.5	5562.	55.43	532.1	26.32	16.17	86.86	510.9	23.53
#1	-.0003	.0012	.0002	.0001	-.0003	-.0003	-.0010	.0000	.0002
#2	-.0002	-.0019	.0006	-.0003	-.0003	-.0003	-.0003	.0002	.0002
#3	.0010	.0006	.0007	.0001	-.0002	-.0004	-.0002	-.0003	.0002
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/20/2016 10:00:08 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2647.1**	**4841.4**	**39370.**	**3630.9**
Stddev	8.0	1.2	82.	6.1
%RSD	.30168	.02406	.20920	.16685
#1	2649.4	4842.7	39278.	3636.4
#2	2638.2	4840.7	39438.	3624.4
#3	2653.6	4840.8	39394.	3631.7

Zoom In Zoom Out

Sample Name: FA34032-3 Acquired: 5/20/2016 10:04:58 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0014**	**.6954**	**.0084**	**.0457**	**-.0006**	**382.4**	**.0058**	**.0509**	**.0019**
Stddev	.0003	.0091	.0008	.0006	.0001	1.5	.0001	.0004	.0004
%RSD	22.80	1.311	9.146	1.287	14.38	.3915	1.353	.7805	22.83
#1	.0016	.7059	.0077	.0463	-.0005	383.0	.0059	.0505	.0021
#2	.0010	.6903	.0082	.0456	-.0005	380.7	.0058	.0513	.0022
#3	.0016	.6901	.0092	.0451	-.0006	383.5	.0058	.0508	.0014

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0286**	**.3043**	**60.09**	**273.8**	**F 10.78**	**.0099**	**F 186.5**	**.1849**	**-.0019**
Stddev	.0004	.0035	.30	1.4	.08	.0004	.6	.0003	.0018
%RSD	1.228	1.149	.4937	.5011	.7208	3.586	.3443	.1694	93.43
#1	.0290	.3064	60.25	273.0	10.84	.0101	187.0	.1847	-.0010
#2	.0284	.3002	60.28	273.0	10.69	.0102	186.6	.1849	-.0008
#3	.0284	.3061	59.75	275.4	10.82	.0095	185.8	.1853	-.0040

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0006**	**.0117**	**25.11**	**-.0004**	**.7468**	**.0100**	**.0001**	**.0072**	**.5907**
Stddev	.0013	.0027	.04	.0009	.0061	.0002	.0013	.0003	.0007
%RSD	221.6	23.08	.1496	198.3	.8120	2.464	1098.	4.780	.1174
#1	.0005	.0149	25.08	-.0001	.7521	.0102	.0013	.0075	.5912
#2	-.0007	.0101	25.12	-.0014	.7481	.0097	-.0013	.0069	.5911
#3	.0020	.0102	25.15	.0002	.7402	.0102	.0003	.0072	.5899

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2160.2**	**4338.1**	**35286.**	**3495.2**
Stddev	4.8	5.6	125.	27.0
%RSD	.22442	.12996	.35431	.77387
#1	2157.6	4339.4	35272.	3513.8
#2	2165.8	4342.9	35418.	3507.6
#3	2157.3	4331.9	35169.	3464.1

Zoom In Zoom Out

Sample Name: FA34018-1 Acquired: 5/20/2016 10:09:31 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0005**	**327.6**	**.0354**	**2.589**	**.0090**	**49.29**	**.0034**	**.0191**	**.3580**
Stddev	.0026	.5	.0017	.012	.0003	.12	.0006	.0006	.0031
%RSD	501.0	.1524	4.676	.4667	3.241	.2342	16.92	3.017	.8578
#1	-.0006	328.1	.0373	2.603	.0088	49.20	.0038	.0198	.3547
#2	.0035	327.7	.0345	2.583	.0093	49.26	.0036	.0186	.3607
#3	-.0013	327.1	.0344	2.580	.0090	49.42	.0027	.0190	.3586

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0332**	**117.3**	**2.830**	**9.069**	**.6972**	**-.0109**	**5.537**	**.1165**	**.3332**
Stddev	.0018	.4	.163	.214	.0039	.0011	.108	.0023	.0047
%RSD	5.355	.3087	5.768	2.363	.5571	10.15	1.948	1.957	1.411
#1	.0346	117.7	2.938	9.163	.6931	-.0119	5.452	.1140	.3356
#2	.0312	117.1	2.909	9.221	.7008	-.0110	5.658	.1171	.3363
#3	.0339	117.1	2.642	8.824	.6976	-.0097	5.500	.1184	.3278

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0182**	**-.0096**	**6.291**	**.0194**	**4.536**	**2.066**	**-.0136**	**.1462**	**.2945**
Stddev	.0022	.0132	.009	.0007	.005	.004	.0045	.0012	.0007
%RSD	12.39	138.5	.1517	3.440	.1153	.2156	32.99	.8431	.2228
#1	-.0157	-.0245	6.294	.0187	4.542	2.062	-.0164	.1454	.2938
#2	-.0188	-.0050	6.299	.0195	4.532	2.070	-.0159	.1476	.2946
#3	-.0200	.0008	6.281	.0200	4.534	2.068	-.0084	.1456	.2951

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2535.5**	**5370.3**	**43796.**	**4026.5**
Stddev	6.9	5.5	246.	14.3
%RSD	.27290	.10161	.56088	.35496
#1	2531.7	5364.6	44073.	4035.4
#2	2543.5	5370.7	43714.	4034.2
#3	2531.3	5375.5	43603.	4010.0

Zoom In Zoom Out

Sample Name: MP30374-D1 Acquired: 5/20/2016 10:13:55 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0016**	**283.7**	**.0322**	**2.259**	**.0061**	**24.26**	**.0024**	**.0172**	**.3128**
Stddev	.0009	.6	.0056	.010	.0004	.19	.0004	.0005	.0004
%RSD	54.20	.2192	17.53	.4412	7.237	.7889	15.47	2.993	.1304
#1	-.0026	283.7	.0269	2.261	.0061	24.41	.0024	.0167	.3131
#2	-.0012	283.1	.0382	2.249	.0066	24.05	.0020	.0171	.3124
#3	-.0010	284.3	.0315	2.268	.0057	24.33	.0028	.0178	.3130

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0383**	**110.8**	**2.254**	**7.950**	**.6463**	**-.0104**	**3.865**	**.1083**	**.3279**
Stddev	.0022	.3	.192	.087	.0033	.0006	.100	.0028	.0065
%RSD	5.869	.2515	8.525	1.092	.5056	6.203	2.580	2.631	1.993
#1	.0371	111.0	2.039	7.864	.6471	-.0108	3.781	.1091	.3211
#2	.0409	110.5	2.408	7.949	.6491	-.0107	3.839	.1051	.3287
#3	.0369	110.9	2.314	8.037	.6427	-.0096	3.975	.1106	.3341

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0162**	**.0011**	**5.263**	**.0244**	**3.885**	**1.805**	**-.0090**	**.1282**	**.2835**
Stddev	.0023	.0090	.013	.0034	.007	.008	.0082	.0009	.0003
%RSD	14.50	820.4	.2503	13.81	.1760	.4240	90.50	.7249	.1195
#1	-.0180	.0086	5.273	.0278	3.892	1.804	-.0061	.1271	.2839
#2	-.0135	-.0089	5.248	.0243	3.879	1.813	-.0027	.1286	.2832
#3	-.0171	.0037	5.267	.0211	3.886	1.798	-.0183	.1289	.2835

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2550.4**	**5302.9**	**43289.**	**3990.2**
Stddev	3.3	13.4	95.	11.0
%RSD	.12824	.25343	.22057	.27665
#1	2550.5	5306.2	43207.	3986.1
#2	2553.6	5314.5	43266.	4002.7
#3	2547.0	5288.2	43394.	3981.8

Zoom In Zoom Out

Sample Name: MP30374-S1 Acquired: 5/20/2016 10:18:18 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0472**	**344.4**	**2.044**	**4.477**	**.0597**	**55.11**	**.0554**	**.5478**	**.5603**
Stddev	.0022	1.8	.005	.038	.0007	.21	.0003	.0013	.0037
%RSD	4.688	.5346	.2688	.8429	1.230	.3891	.5063	.2352	.6641
#1	.0454	344.9	2.050	4.506	.0589	55.29	.0551	.5476	.5646
#2	.0497	346.0	2.040	4.491	.0601	55.18	.0557	.5492	.5585
#3	.0464	342.4	2.043	4.435	.0602	54.87	.0555	.5466	.5578

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.2903**	**140.4**	**26.81**	**33.61**	**1.242**	**.4464**	**29.30**	**.6709**	**.8364**
Stddev	.0020	.5	.20	.30	.003	.0029	.23	.0022	.0125
%RSD	.6881	.3834	.7628	.8886	.2414	.6402	.7903	.3285	1.494
#1	.2893	140.5	26.61	33.29	1.245	.4433	29.48	.6684	.8223
#2	.2890	140.8	26.78	33.88	1.243	.4471	29.39	.6720	.8408
#3	.2926	139.8	27.02	33.65	1.239	.4488	29.04	.6724	.8462

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.2196**	**2.021**	**6.555**	**.5278**	**4.764**	**2.424**	**2.262**	**.6311**	**.7740**
Stddev	.0060	.002	.016	.0016	.026	.002	.022	.0024	.0013
%RSD	2.730	.0937	.2430	.2981	.5522	.0761	.9652	.3848	.1699
#1	.2141	2.023	6.537	.5260	4.774	2.423	2.238	.6323	.7754
#2	.2188	2.019	6.561	.5284	4.783	2.422	2.280	.6283	.7736
#3	.2260	2.020	6.566	.5289	4.734	2.426	2.267	.6327	.7729

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2482.5**	**5266.3**	**42649.**	**4003.5**
Stddev	6.0	12.5	55.	12.2
%RSD	.24257	.23704	.12870	.30558
#1	2477.0	5268.7	42636.	3999.0
#2	2481.6	5252.8	42601.	3994.2
#3	2489.0	5277.4	42709.	4017.4

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: MP30374-S2 Acquired: 5/20/2016 10:22:36 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0467**	**336.0**	**1.956**	**4.323**	**.0577**	**58.10**	**.0537**	**.5278**	**.5428**
Stddev	.0027	1.6	.007	.021	.0005	.26	.0003	.0035	.0013
%RSD	5.801	.4884	.3743	.4764	.8021	.4419	.6377	.6722	.2420
#1	.0496	334.8	1.962	4.317	.0582	57.85	.0536	.5298	.5435
#2	.0442	335.3	1.958	4.306	.0573	58.10	.0540	.5298	.5413
#3	.0461	337.9	1.948	4.346	.0576	58.36	.0534	.5237	.5437

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.2861**	**137.9**	**25.91**	**32.40**	**1.194**	**.4286**	**28.21**	**.6494**	**.9480**
Stddev	.0026	.4	.24	.44	.001	.0027	.04	.0043	.0159
%RSD	.9085	.2624	.9264	1.364	.1086	.6320	.1584	.6616	1.677
#1	.2879	137.5	26.17	32.08	1.195	.4294	28.23	.6525	.9627
#2	.2831	137.8	25.70	32.22	1.192	.4308	28.24	.6512	.9501
#3	.2873	138.2	25.85	32.91	1.194	.4256	28.16	.6445	.9311

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.2192**	**1.946**	**6.273**	**.5084**	**4.616**	**2.460**	**2.179**	**.6191**	**.7780**
Stddev	.0101	.006	.042	.0081	.015	.001	.011	.0020	.0052
%RSD	4.625	.2882	.6689	1.585	.3343	.0536	.5216	.3261	.6692
#1	.2181	1.940	6.304	.5058	4.609	2.460	2.179	.6192	.7810
#2	.2298	1.948	6.291	.5174	4.605	2.459	2.190	.6170	.7811
#3	.2097	1.951	6.226	.5019	4.634	2.461	2.168	.6210	.7720

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2494.5**	**5274.1**	**42818.**	**4018.9**
Stddev	20.7	29.5	57.	21.4
%RSD	.82942	.55880	.13340	.53238
#1	2485.6	5261.1	42809.	4040.7
#2	2479.8	5253.4	42880.	4018.0
#3	2518.2	5307.9	42766.	3998.0

Zoom In Zoom Out

Sample Name: MP30374-PS1 Acquired: 5/20/2016 10:26:55 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0446**	**339.3**	**.1361**	**2.910**	**.0584**	**55.27**	**.0543**	**.0696**	**.4149**
Stddev	.0013	2.5	.0106	.022	.0008	.55	.0009	.0007	.0039
%RSD	3.027	.7222	7.790	.7505	1.420	.9982	1.567	1.005	.9457
#1	.0461	338.1	.1242	2.894	.0579	54.93	.0539	.0702	.4118
#2	.0438	342.2	.1398	2.935	.0594	55.91	.0537	.0698	.4135
#3	.0438	337.8	.1444	2.902	.0580	54.97	.0553	.0688	.4193

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.1391**	**124.0**	**11.37**	**13.92**	**.7628**	**.0832**	**15.34**	**.2275**	**.3943**
Stddev	.0028	1.0	.36	.29	.0053	.0007	.23	.0017	.0070
%RSD	2.019	.7799	3.163	2.077	.6926	.8493	1.489	.7336	1.787
#1	.1423	123.4	11.37	13.64	.7576	.0830	15.22	.2294	.3878
#2	.1382	125.1	11.72	14.22	.7627	.0840	15.60	.2263	.4018
#3	.1369	123.5	11.00	13.89	.7682	.0827	15.19	.2269	.3934

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0797**	**.1051**	**6.550**	**.0672**	**4.697**	**2.240**	**.0932**	**.1980**	**.5355**
Stddev	.0077	.0084	.014	.0005	.046	.004	.0013	.0007	.0018
%RSD	9.594	7.998	.2193	.7275	.9750	.1838	1.391	.3565	.3419
#1	.0878	.0976	6.566	.0667	4.663	2.236	.0946	.1973	.5334
#2	.0788	.1142	6.541	.0672	4.749	2.241	.0931	.1987	.5366
#3	.0726	.1036	6.542	.0677	4.677	2.244	.0920	.1980	.5364

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2486.9**	**5280.6**	**42696.**	**4001.7**
Stddev	8.2	22.3	440.	33.3
%RSD	.33115	.42191	1.0305	.83338
#1	2481.5	5266.1	42192.	3989.4
#2	2482.7	5269.4	42895.	3976.2
#3	2496.4	5306.2	43002.	4039.4

Zoom In Zoom Out

Sample Name: MP30374-SD1 Acquired: 5/20/2016 10:31:17 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 50.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0094**	**365.4**	**.0281**	**2.829**	**-.0075**	**53.84**	**-.0005**	**.0190**	**.3869**
Stddev	.0108	1.3	.0157	.024	.0028	.43	.0009	.0024	.0171
%RSD	115.0	.3551	55.94	.8430	37.09	.8078	165.5	12.81	4.409
#1	.0212	366.8	.0459	2.854	-.0107	54.31	-.0014	.0211	.3748
#2	.0071	364.3	.0162	2.826	-.0060	53.74	.0004	.0197	.3795
#3	-.0001	365.3	.0221	2.806	-.0057	53.45	-.0006	.0163	.4064

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0446**	**130.2**	**2.226**	**9.120**	**.7648**	**-.0694**	**5.693**	**.1300**	**.2905**
Stddev	.0015	.9	1.442	.138	.0060	.0031	.329	.0098	.0436
%RSD	3.413	.6656	64.79	1.513	.7870	4.462	5.787	7.534	15.01
#1	.0458	130.9	1.688	9.268	.7593	-.0661	6.039	.1215	.2443
#2	.0429	129.3	1.130	9.099	.7640	-.0697	5.383	.1279	.2962
#3	.0451	130.6	3.859	8.994	.7713	-.0723	5.657	.1407	.3309

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0686**	**-.0223**	**11.12**	**.0070**	**5.006**	**2.583**	**.0009**	**.1671**	**.5561**
Stddev	.0362	.0658	.07	.0066	.010	.035	.0075	.0100	.0004
%RSD	52.70	294.7	.5902	95.13	.1994	1.344	808.3	5.976	.0808
#1	-.0606	.0388	11.04	.0066	5.017	2.551	.0088	.1719	.5556
#2	-.0371	-.0138	11.15	.0138	5.001	2.579	.0002	.1556	.5563
#3	-.1081	-.0920	11.16	.0005	4.998	2.620	-.0062	.1738	.5564

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2596.0**	**4907.8**	**40234.**	**3693.4**
Stddev	4.1	10.5	135.	22.0
%RSD	.15657	.21368	.33459	.59586
#1	2598.7	4916.2	40373.	3668.0
#2	2597.9	4911.1	40224.	3707.6
#3	2591.3	4896.0	40104.	3704.5

Zoom In Zoom Out

Sample Name: FA34018-2 Acquired: 5/20/2016 10:35:45 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0016**	**284.5**	**.0329**	**2.795**	**.0052**	**78.90**	**.0013**	**.0085**	**.2951**
Stddev	.0013	.4	.0018	.011	.0004	.51	.0005	.0007	.0014
%RSD	84.82	.1517	5.349	.3775	8.188	.6467	38.50	7.699	.4641
#1	-.0007	284.1	.0318	2.782	.0056	78.36	.0007	.0089	.2949
#2	-.0009	284.9	.0349	2.800	.0052	79.37	.0016	.0078	.2938
#3	-.0031	284.5	.0319	2.801	.0047	78.97	.0015	.0090	.2965

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0256**	**86.40**	**2.152**	**7.274**	**1.017**	**-.0135**	**3.327**	**.0930**	**.3008**
Stddev	.0008	.18	.301	.201	.003	.0013	.035	.0014	.0041
%RSD	3.001	.2047	14.00	2.759	.2457	9.761	1.063	1.458	1.356
#1	.0248	86.21	1.863	7.166	1.014	-.0150	3.354	.0937	.3053
#2	.0263	86.56	2.464	7.506	1.016	-.0126	3.287	.0938	.2973
#3	.0256	86.42	2.129	7.151	1.019	-.0129	3.339	.0914	.2999

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0248**	**-.0025**	**5.118**	**.0271**	**4.887**	**1.462**	**-.0096**	**.1042**	**.3016**
Stddev	.0089	.0226	.005	.0033	.006	.006	.0012	.0010	.0010
%RSD	36.05	919.3	.1055	12.07	.1145	.4124	12.66	.9738	.3293
#1	-.0166	-.0285	5.123	.0248	4.885	1.456	-.0082	.1050	.3027
#2	-.0343	.0117	5.118	.0309	4.883	1.462	-.0105	.1045	.3015
#3	-.0235	.0095	5.112	.0257	4.893	1.468	-.0100	.1031	.3007

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2525.4**	**5339.0**	**43760.**	**4071.5**
Stddev	7.5	8.3	146.	25.7
%RSD	.29843	.15566	.33453	.63105
#1	2517.5	5329.4	43625.	4092.5
#2	2526.3	5344.2	43915.	4042.8
#3	2532.5	5343.3	43740.	4079.1

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: FA34018-3 Acquired: 5/20/2016 10:40:10 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0054**	**257.4**	**.0410**	**3.329**	**.0055**	**95.38**	**.0113**	**.0138**	**.3680**
Stddev	.0019	.4	.0044	.023	.0007	.51	.0006	.0012	.0048
%RSD	34.81	.1588	10.69	.6955	12.07	.5375	5.116	8.797	1.314
#1	.0072	257.1	.0363	3.325	.0049	94.83	.0107	.0128	.3734
#2	.0055	257.3	.0420	3.309	.0062	95.49	.0118	.0152	.3640
#3	.0035	257.9	.0449	3.354	.0054	95.84	.0114	.0134	.3666

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.3324**	**103.3**	**2.867**	**8.669**	**2.108**	**-.0038**	**3.638**	**.1051**	**4.995**
Stddev	.0007	.3	.291	.139	.005	.0012	.040	.0006	.002
%RSD	.2012	.2471	10.16	1.608	.2384	32.50	1.085	.6089	.0423
#1	.3324	103.4	3.067	8.508	2.111	-.0052	3.628	.1047	4.993
#2	.3317	103.0	2.532	8.737	2.111	-.0030	3.682	.1058	4.996
#3	.3331	103.5	3.000	8.761	2.103	-.0032	3.605	.1047	4.997

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0141**	**.0092**	**5.235**	**.1897**	**3.765**	**1.482**	**-.0100**	**.1176**	**3.502**
Stddev	.0088	.0061	.026	.0028	.010	.003	.0036	.0017	.001
%RSD	62.27	66.35	.5049	1.470	.2671	.2055	35.46	1.488	.0277
#1	-.0114	.0065	5.233	.1922	3.768	1.486	-.0141	.1166	3.503
#2	-.0239	.0163	5.263	.1867	3.754	1.481	-.0075	.1196	3.501
#3	-.0070	.0050	5.210	.1903	3.774	1.480	-.0085	.1166	3.501

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2524.2**	**5208.6**	**42617.**	**3957.6**
Stddev	6.0	18.0	158.	29.6
%RSD	.23802	.34616	.37053	.74705
#1	2518.7	5197.9	42494.	3968.1
#2	2523.3	5198.5	42562.	3980.5
#3	2530.6	5229.4	42795.	3924.2

Zoom In Zoom Out

Sample Name: FA34018-4 Acquired: 5/20/2016 10:44:32 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0000**	**276.5**	**.0315**	**2.188**	**.0066**	**45.32**	**.0017**	**.0120**	**.3017**
Stddev	.0013	2.0	.0040	.009	.0010	.40	.0002	.0009	.0024
%RSD	3937.	.7072	12.59	.4174	14.42	.8819	13.25	7.588	.7900
#1	-.0014	278.2	.0269	2.197	.0057	45.65	.0016	.0121	.3043
#2	.0008	277.1	.0335	2.188	.0076	45.44	.0020	.0111	.2997
#3	.0007	274.4	.0340	2.179	.0066	44.88	.0016	.0129	.3011

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0217**	**98.46**	**2.047**	**7.626**	**.7999**	**-.0141**	**3.735**	**.0993**	**.2546**
Stddev	.0020	.62	.335	.149	.0036	.0004	.130	.0006	.0030
%RSD	9.457	.6328	16.34	1.955	.4507	2.617	3.469	.5566	1.174
#1	.0203	99.03	1.673	7.797	.8039	-.0144	3.626	.0988	.2515
#2	.0207	98.56	2.316	7.523	.7987	-.0137	3.701	.0994	.2550
#3	.0240	97.79	2.151	7.559	.7970	-.0142	3.878	.0999	.2574

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0179**	**.0001**	**3.841**	**.0179**	**3.776**	**1.680**	**-.0131**	**.1172**	**.2702**
Stddev	.0054	.0105	.011	.0028	.033	.007	.0099	.0007	.0021
%RSD	30.06	19460.	.2919	15.58	.8838	.4023	75.62	.6143	.7849
#1	-.0125	.0043	3.838	.0205	3.805	1.687	-.0017	.1175	.2697
#2	-.0232	.0078	3.853	.0184	3.783	1.678	-.0176	.1164	.2683
#3	-.0179	-.0119	3.832	.0150	3.740	1.674	-.0199	.1177	.2725

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2545.5**	**5277.5**	**42951.**	**3976.4**
Stddev	3.8	7.6	200.	32.1
%RSD	.14849	.14417	.46514	.80815
#1	2549.4	5282.3	42736.	3942.7
#2	2541.8	5268.7	43130.	3979.7
#3	2545.4	5281.5	42986.	4006.7

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/20/2016 10:48:55 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2520**	**40.00**	**2.106**	**1.975**	**2.038**	**39.83**	**2.129**	**2.087**	**2.087**
Stddev	.0004	.03	.001	.005	.003	.13	.001	.002	.006
%RSD	.1527	.0822	.0680	.2747	.1477	.3206	.0554	.0771	.2826
#1	.2523	40.03	2.105	1.974	2.036	39.96	2.129	2.085	2.089
#2	.2515	40.02	2.107	1.971	2.042	39.82	2.127	2.086	2.092
#3	.2521	39.97	2.107	1.981	2.038	39.71	2.129	2.088	2.081
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.003**	**41.84**	**39.45**	**39.73**	**2.143**	**2.085**	**41.13**	**2.143**	**2.068**
Stddev	.001	.13	.03	.24	.007	.002	.13	.002	.006
%RSD	.0310	.3213	.0685	.6082	.3190	.1060	.3129	.0932	.3050
#1	2.002	41.96	39.42	39.82	2.142	2.082	40.99	2.145	2.076
#2	2.004	41.88	39.47	39.92	2.151	2.086	41.16	2.143	2.064
#3	2.003	41.69	39.46	39.46	2.137	2.086	41.24	2.141	2.066
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.094**	**2.085**	**2.169**	**2.091**	**1.993**	**2.139**	**2.090**	**2.122**	**2.079**
Stddev	.002	.003	.004	.001	.002	.005	.009	.005	.005
%RSD	.0883	.1247	.1831	.0365	.1140	.2488	.4107	.2182	.2444
#1	2.092	2.082	2.166	2.090	1.993	2.138	2.099	2.122	2.079
#2	2.096	2.084	2.173	2.090	1.990	2.145	2.090	2.126	2.074
#3	2.093	2.087	2.167	2.092	1.994	2.135	2.082	2.117	2.085
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/20/2016 10:48:55 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2197.9**	**4480.1**	**36649.**	**3507.7**
Stddev	.9	6.6	60.	21.0
%RSD	.04070	.14802	.16407	.59947
#1	2197.2	4485.5	36608.	3488.0
#2	2198.9	4472.7	36621.	3505.3
#3	2197.6	4482.0	36719.	3529.8

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/20/2016 10:53:07 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**-.0076**	**-.0003**	**-.0001**	**-.0001**	**.0008**	**.0002**	**.0002**	**.0001**
Stddev	.0001	.0092	.0004	.0002	.0001	.0025	.0001	.0000	.0002
%RSD	52.48	121.7	126.3	188.2	75.75	312.8	64.83	14.27	292.3
#1	.0004	-.0105	-.0002	.0000	-.0001	.0007	.0003	.0002	.0002
#2	.0001	-.0150	.0000	-.0003	-.0001	-.0017	.0002	.0002	.0002
#3	.0002	.0028	-.0008	.0000	-.0002	.0034	.0001	.0001	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0004**	**-.0460**	**-.0348**	**.0000**	**.0003**	**.0148**	**.0002**	**.0000**
Stddev	.0001	.0027	.0363	.0165	.0001	.0003	.0008	.0001	.0004
%RSD	35.04	620.0	79.06	47.50	155.6	111.6	5.730	45.42	2212.
#1	.0002	.0029	-.0811	-.0307	.0000	.0006	.0155	.0003	.0001
#2	.0003	.0008	-.0483	-.0531	.0000	.0002	.0152	.0003	.0004
#3	.0003	-.0025	-.0085	-.0207	.0001	.0000	.0139	.0001	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0003**	**.0009**	**.0011**	**.0000**	**-.0003**	**.0001**	**-.0003**	**.0004**	**.0003**
Stddev	.0008	.0019	.0003	.0004	.0001	.0000	.0009	.0002	.0000
%RSD	234.9	214.7	28.32	3532.	42.19	48.91	271.1	55.11	11.51
#1	.0003	-.0012	.0015	.0005	-.0002	.0001	.0006	.0003	.0004
#2	-.0001	.0015	.0011	-.0003	-.0004	.0001	-.0005	.0003	.0004
#3	-.0012	.0025	.0008	-.0002	-.0002	.0000	-.0010	.0007	.0003
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/20/2016 10:53:07 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2609.6**	**4750.0**	**39284.**	**3633.3**
Stddev	2.7	12.3	133.	32.3
%RSD	.10214	.25854	.33769	.88988
#1	2609.3	4755.0	39135.	3618.3
#2	2612.3	4759.1	39390.	3611.1
#3	2607.0	4736.1	39327.	3670.4

Zoom In Zoom Out

Sample Name: FA34018-5 Acquired: 5/20/2016 10:57:39 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0021**	**293.7**	**.0363**	**2.510**	**.0074**	**32.95**	**.0027**	**.0135**	**.3246**
Stddev	.0042	1.2	.0018	.009	.0008	.22	.0008	.0002	.0033
%RSD	200.7	.4177	4.908	.3556	11.06	.6658	28.24	1.540	1.009
#1	-.0022	294.8	.0346	2.514	.0064	33.20	.0033	.0136	.3258
#2	.0022	292.4	.0381	2.516	.0079	32.80	.0029	.0132	.3271
#3	-.0063	293.9	.0361	2.499	.0077	32.86	.0018	.0136	.3209

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0252**	**99.91**	**2.714**	**7.819**	**.7960**	**-.0095**	**4.628**	**.1023**	**.3173**
Stddev	.0015	.31	.365	.474	.0018	.0011	.049	.0007	.0037
%RSD	5.817	.3118	13.47	6.057	.2313	11.73	1.052	.6856	1.163
#1	.0265	100.3	2.337	8.253	.7946	-.0105	4.660	.1020	.3139
#2	.0254	99.66	3.067	7.891	.7954	-.0095	4.572	.1031	.3168
#3	.0236	99.81	2.739	7.314	.7981	-.0083	4.653	.1018	.3212

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0120**	**.0074**	**4.202**	**.0200**	**4.363**	**1.709**	**-.0207**	**.1212**	**.2949**
Stddev	.0115	.0073	.011	.0038	.020	.005	.0032	.0011	.0018
%RSD	95.36	98.38	.2571	18.78	.4500	.2958	15.45	.8887	.6249
#1	-.0226	.0078	4.190	.0209	4.383	1.705	-.0209	.1224	.2957
#2	.0002	.0144	4.206	.0159	4.344	1.707	-.0174	.1205	.2927
#3	-.0137	-.0001	4.211	.0232	4.361	1.714	-.0238	.1207	.2962

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2520.6**	**5317.8**	**43670.**	**4044.4**
Stddev	4.3	12.2	165.	20.4
%RSD	.17215	.22856	.37722	.50445
#1	2522.1	5326.3	43491.	4032.4
#2	2523.9	5323.2	43815.	4068.0
#3	2515.6	5303.8	43704.	4032.9

Zoom In Zoom Out

Sample Name: FA34018-6 Acquired: 5/20/2016 11:02:04 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0023**	**280.9**	**.0379**	**2.594**	**.0056**	**44.25**	**.0031**	**.0198**	**.2956**
Stddev	.0035	1.4	.0092	.021	.0009	.22	.0003	.0009	.0027
%RSD	153.2	.5152	24.19	.7908	16.34	.4993	9.081	4.760	.9138
#1	-.0007	279.6	.0358	2.572	.0049	44.00	.0029	.0194	.2942
#2	-.0063	282.4	.0479	2.599	.0054	44.34	.0035	.0209	.2940
#3	.0001	280.6	.0300	2.612	.0067	44.42	.0030	.0191	.2988

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0586**	**93.83**	**2.692**	**7.656**	**1.151**	**-.0117**	**3.838**	**.0970**	**.4858**
Stddev	.0040	.26	.302	.187	.002	.0013	.011	.0021	.0013
%RSD	6.798	.2777	11.21	2.447	.1537	11.32	.2886	2.117	.2776
#1	.0587	93.69	2.421	7.798	1.150	-.0118	3.834	.0949	.4862
#2	.0626	94.14	2.638	7.727	1.151	-.0130	3.830	.0973	.4843
#3	.0546	93.68	3.017	7.444	1.153	-.0103	3.851	.0989	.4870

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0163**	**.0082**	**5.214**	**.0430**	**4.296**	**1.578**	**-.0178**	**.1143**	**.5843**
Stddev	.0028	.0177	.017	.0022	.017	.004	.0045	.0027	.0022
%RSD	17.48	216.7	.3221	5.082	.4020	.2441	25.31	2.339	.3803
#1	-.0131	.0270	5.223	.0436	4.276	1.580	-.0203	.1171	.5833
#2	-.0186	.0056	5.225	.0447	4.307	1.580	-.0205	.1118	.5828
#3	-.0172	-.0081	5.195	.0405	4.305	1.574	-.0126	.1140	.5869

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2488.0**	**5226.5**	**42510.**	**3904.4**
Stddev	2.1	18.4	152.	15.9
%RSD	.08297	.35173	.35831	.40699
#1	2487.6	5212.8	42538.	3922.6
#2	2486.1	5219.3	42647.	3893.8
#3	2490.2	5247.4	42346.	3896.7

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: FA34018-7 Acquired: 5/20/2016 11:06:28 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0023**	**247.4**	**.0332**	**2.332**	**.0050**	**73.66**	**.0019**	**.0141**	**.2789**
Stddev	.0042	.5	.0029	.010	.0004	.46	.0003	.0007	.0015
%RSD	182.4	.2144	8.860	.4359	7.995	.6182	15.90	5.050	.5240
#1	-.0043	246.8	.0317	2.331	.0045	73.25	.0019	.0133	.2803
#2	-.0051	247.5	.0314	2.343	.0051	74.15	.0023	.0147	.2790
#3	.0025	247.8	.0366	2.323	.0053	73.57	.0017	.0142	.2774

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0453**	**80.70**	**2.040**	**18.13**	**.8554**	**-.0127**	**4.012**	**.0923**	**.4730**
Stddev	.0005	.21	.226	.34	.0038	.0010	.006	.0013	.0044
%RSD	1.112	.2636	11.09	1.849	.4419	8.226	.1426	1.393	.9337
#1	.0458	80.58	1.817	18.30	.8535	-.0120	4.017	.0930	.4729
#2	.0449	80.94	2.269	17.75	.8598	-.0139	4.006	.0908	.4686
#3	.0450	80.58	2.034	18.35	.8530	-.0123	4.012	.0931	.4774

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0145**	**.0087**	**4.775**	**.0450**	**4.079**	**1.349**	**-.0213**	**.1004**	**.3556**
Stddev	.0032	.0095	.006	.0010	.004	.002	.0058	.0025	.0010
%RSD	22.11	108.8	.1273	2.256	.1064	.1091	27.33	2.496	.2795
#1	-.0115	.0165	4.771	.0440	4.074	1.348	-.0210	.0999	.3566
#2	-.0179	-.0019	4.782	.0460	4.080	1.351	-.0156	.0981	.3553
#3	-.0142	.0116	4.773	.0450	4.082	1.350	-.0273	.1031	.3547

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2498.0**	**5226.1**	**42707.**	**3921.6**
Stddev	1.3	4.2	233.	20.1
%RSD	.05182	.08074	.54637	.51273
#1	2499.2	5225.4	42908.	3943.8
#2	2498.2	5222.2	42451.	3904.8
#3	2496.6	5230.6	42762.	3916.0

Zoom In Zoom Out

Sample Name: FA33881-1R Acquired: 5/20/2016 11:10:51 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0002**	**71.37**	**.0249**	**.5639**	**.0024**	**26.15**	**.0076**	**.0102**	**.0981**
Stddev	.0002	.32	.0002	.0021	.0001	.19	.0000	.0001	.0002
%RSD	109.9	.4482	.8221	.3781	2.757	.7176	.3352	.9131	.1583
#1	.0003	71.22	.0251	.5642	.0023	26.04	.0076	.0102	.0983
#2	-.0001	71.15	.0249	.5616	.0024	26.05	.0076	.0102	.0981
#3	.0003	71.73	.0247	.5658	.0024	26.37	.0076	.0103	.0980

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.1479**	**46.73**	**1.211**	**2.370**	**2.079**	**.0027**	**.2325**	**.0353**	**.2414**
Stddev	.0004	.31	.018	.039	.024	.0002	.0059	.0001	.0006
%RSD	.2533	.6588	1.442	1.625	1.134	7.393	2.537	.2774	.2637
#1	.1475	46.58	1.223	2.347	2.074	.0028	.2306	.0353	.2407
#2	.1483	46.53	1.191	2.348	2.059	.0028	.2277	.0352	.2415
#3	.1478	47.08	1.219	2.414	2.105	.0025	.2391	.0354	.2419

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0023**	**.0019**	**1.767**	**.0585**	**.1454**	**.7498**	**-.0037**	**.1135**	**1.440**
Stddev	.0004	.0006	.006	.0002	.0014	.0010	.0009	.0002	.003
%RSD	17.91	29.33	.3310	.3591	.9365	.1375	25.16	.2082	.2130
#1	.0018	.0019	1.763	.0585	.1446	.7490	-.0027	.1132	1.442
#2	.0024	.0014	1.765	.0587	.1447	.7510	-.0045	.1136	1.437
#3	.0026	.0025	1.774	.0583	.1470	.7494	-.0038	.1136	1.443

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2426.8**	**5487.2**	**44799.**	**4168.2**
Stddev	5.5	10.2	160.	35.8
%RSD	.22617	.18503	.35663	.85829
#1	2431.0	5487.8	44929.	4190.1
#2	2420.6	5497.0	44849.	4187.6
#3	2428.9	5476.7	44621.	4126.9

Zoom In Zoom Out

Sample Name: FA33881-8R Acquired: 5/20/2016 11:15:19 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0002**	**76.72**	**.0464**	**.4436**	**.0023**	**6.774**	**.0016**	**.0115**	**.1962**
Stddev	.0000	.24	.0002	.0017	.0001	.039	.0001	.0001	.0006
%RSD	22.13	.3126	.4402	.3831	2.329	.5730	8.884	1.060	.3004
#1	-.0001	76.73	.0463	.4456	.0024	6.790	.0016	.0116	.1966
#2	-.0002	76.95	.0463	.4426	.0023	6.801	.0014	.0114	.1964
#3	-.0002	76.48	.0466	.4427	.0023	6.729	.0017	.0116	.1955

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.2044**	**90.81**	**1.293**	**2.154**	**.5227**	**.0040**	**.1492**	**.0390**	**.2197**
Stddev	.0011	.42	.030	.039	.0024	.0002	.0071	.0002	.0009
%RSD	.5601	.4606	2.300	1.818	.4566	5.976	4.733	.4264	.4019
#1	.2041	90.66	1.326	2.116	.5233	.0041	.1571	.0392	.2195
#2	.2034	91.28	1.267	2.194	.5248	.0037	.1437	.0388	.2206
#3	.2057	90.49	1.287	2.151	.5201	.0041	.1466	.0390	.2188

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0026**	**.0013**	**2.005**	**.0499**	**.1115**	**.8813**	**-.0049**	**.1210**	**.2662**
Stddev	.0009	.0018	.005	.0005	.0002	.0026	.0009	.0004	.0009
%RSD	32.28	133.2	.2748	1.047	.1635	.2923	18.39	.3353	.3249
#1	.0018	-.0003	2.012	.0504	.1115	.8818	-.0059	.1210	.2666
#2	.0035	.0032	2.003	.0499	.1117	.8835	-.0043	.1214	.2667
#3	.0027	.0011	2.001	.0494	.1114	.8785	-.0045	.1206	.2652

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2461.7**	**5073.8**	**41209.**	**3790.1**
Stddev	5.0	5.7	93.	25.6
%RSD	.20392	.11201	.22670	.67504
#1	2467.1	5067.2	41107.	3802.7
#2	2457.1	5076.6	41232.	3760.7
#3	2460.8	5077.5	41290.	3807.0

Zoom In Zoom Out

Sample Name: FA33462-2R Acquired: 5/20/2016 11:19:39 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0002**	**20.50**	**.0202**	**.2668**	**.0006**	**26.02**	**.0001**	**.0016**	**.0353**
Stddev	.0001	.06	.0002	.0013	.0000	.04	.0000	.0001	.0003
%RSD	32.20	.2956	1.232	.4790	8.275	.1695	39.76	5.495	.7852
#1	-.0002	20.51	.0202	.2679	.0006	26.07	.0001	.0016	.0350
#2	-.0002	20.44	.0204	.2654	.0005	25.99	.0000	.0016	.0355
#3	-.0003	20.56	.0199	.2670	.0006	25.99	.0001	.0017	.0353

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0231**	**6.051**	**.2253**	**.8491**	**.0245**	**.0006**	**.1639**	**.0082**	**.0762**
Stddev	.0002	.007	.0110	.0065	.0001	.0000	.0050	.0001	.0009
%RSD	.7717	.1200	4.879	.7629	.2928	2.930	3.072	1.102	1.221
#1	.0232	6.049	.2126	.8456	.0245	.0006	.1596	.0083	.0753
#2	.0229	6.046	.2318	.8452	.0245	.0006	.1695	.0081	.0761
#3	.0232	6.060	.2314	.8566	.0246	.0006	.1628	.0081	.0771

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0011**	**.0057**	**1.818**	**.0179**	**.7267**	**.1988**	**-.0047**	**.0683**	**.0502**
Stddev	.0009	.0017	.003	.0001	.0020	.0002	.0010	.0001	.0002
%RSD	78.82	29.61	.1833	.4942	.2734	.0856	21.16	.1131	.4614
#1	.0001	.0072	1.820	.0179	.7266	.1988	-.0055	.0682	.0502
#2	.0018	.0062	1.814	.0178	.7248	.1990	-.0036	.0684	.0504
#3	.0015	.0039	1.819	.0180	.7288	.1986	-.0051	.0683	.0499

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2517.8**	**5140.5**	**42216.**	**3841.5**
Stddev	6.6	9.1	176.	10.5
%RSD	.26034	.17680	.41601	.27418
#1	2511.5	5136.0	42207.	3852.5
#2	2524.6	5151.0	42046.	3831.4
#3	2517.3	5134.5	42397.	3840.6

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: FA33462-4R Acquired: 5/20/2016 11:24:00 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0004**	**41.48**	**.0080**	**.1478**	**.0004**	**6.100**	**.0000**	**.0023**	**.0544**
Stddev	.0006	.13	.0008	.0006	.0001	.006	.0001	.0000	.0002
%RSD	132.5	.3177	10.21	.3812	15.65	.1010	152.0	2.102	.3384
#1	-.0011	41.48	.0086	.1480	.0004	6.106	.0000	.0023	.0542
#2	-.0001	41.61	.0083	.1482	.0005	6.094	.0000	.0022	.0546
#3	-.0001	41.35	.0070	.1472	.0003	6.101	.0001	.0023	.0544

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0135**	**21.30**	**.5182**	**2.899**	**.0306**	**.0007**	**.2252**	**.0160**	**.0743**
Stddev	.0001	.05	.0269	.007	.0002	.0000	.0036	.0002	.0006
%RSD	.7260	.2353	5.197	.2408	.4980	3.126	1.582	1.047	.7606
#1	.0135	21.33	.5287	2.891	.0305	.0007	.2241	.0159	.0748
#2	.0135	21.32	.5383	2.903	.0308	.0007	.2223	.0162	.0744
#3	.0134	21.24	.4876	2.902	.0306	.0007	.2292	.0160	.0737

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0008**	**.0031**	**1.737**	**.0189**	**.1800**	**.2700**	**-.0033**	**.0534**	**.0258**
Stddev	.0010	.0008	.003	.0003	.0013	.0009	.0009	.0004	.0001
%RSD	121.5	25.97	.1975	1.583	.7204	.3220	27.20	.6626	.2281
#1	-.0020	.0025	1.734	.0192	.1805	.2691	-.0027	.0537	.0258
#2	-.0002	.0028	1.735	.0188	.1810	.2709	-.0043	.0530	.0258
#3	-.0002	.0040	1.741	.0186	.1785	.2699	-.0027	.0534	.0259

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2526.1**	**5030.0**	**41014.**	**3718.6**
Stddev	4.1	8.5	137.	2.6
%RSD	.16072	.16847	.33282	.07125
#1	2529.4	5033.1	41169.	3721.6
#2	2521.5	5036.5	40962.	3716.4
#3	2527.3	5020.4	40912.	3717.9

Zoom In Zoom Out

Sample Name: FA33462-6R Acquired: 5/20/2016 11:28:22 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0002**	**2.124**	**.0150**	**.0204**	**-.0003**	**4.210**	**-.0002**	**-.0001**	**.0052**
Stddev	.0003	.011	.0000	.0002	.0000	.007	.0000	.0000	.0003
%RSD	153.0	.4963	.0931	.9024	14.54	.1605	19.05	12.64	5.242
#1	.0001	2.126	.0150	.0206	-.0003	4.218	-.0002	-.0001	.0053
#2	-.0003	2.133	.0150	.0202	-.0003	4.205	-.0001	-.0001	.0055
#3	-.0004	2.113	.0150	.0205	-.0003	4.208	-.0002	-.0001	.0050

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0178**	**1.477**	**.0920**	**.2075**	**.0052**	**-.0007**	**.1890**	**.0015**	**.0074**
Stddev	.0005	.009	.0285	.0090	.0000	.0001	.0084	.0000	.0002
%RSD	3.057	.6344	30.94	4.317	.2558	11.64	4.421	3.329	2.933
#1	.0176	1.486	.0632	.1972	.0052	-.0006	.1807	.0014	.0074
#2	.0184	1.476	.1201	.2127	.0052	-.0007	.1974	.0015	.0071
#3	.0174	1.468	.0926	.2126	.0052	-.0007	.1890	.0015	.0075

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0000**	**.0024**	**.6480**	**.0194**	**.0764**	**.1862**	**-.0027**	**.0079**	**.0037**
Stddev	.000	.0014	.0034	.0000	.0004	.0014	.0004	.0001	.0000
%RSD	885.5	59.15	.5176	.0967	.5674	.7454	16.18	1.572	1.334
#1	.0003	.0028	.6508	.0194	.0769	.1854	-.0024	.0077	.0037
#2	-.0003	.0036	.6489	.0194	.0764	.1878	-.0025	.0080	.0037
#3	-.0001	.0008	.6443	.0194	.0761	.1854	-.0032	.0079	.0036

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2588.9**	**4857.2**	**40106.**	**3618.2**
Stddev	9.6	19.5	223.	5.2
%RSD	.37261	.40196	.55587	.14448
#1	2577.9	4835.2	40065.	3622.4
#2	2593.4	4863.9	39907.	3619.7
#3	2595.5	4872.5	40347.	3612.3

Zoom In Zoom Out

Sample Name: FA34019-1 Acquired: 5/20/2016 11:32:49 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0003**	**50.88**	**.0036**	**.1103**	**.0010**	**19.62**	**.0007**	**.0028**	**.1235**
Stddev	.0003	.14	.0015	.0003	.0000	.12	.0001	.0001	.0002
%RSD	95.85	.2655	42.02	.2735	3.478	.6136	7.770	3.673	.1319
#1	.0000	50.86	.0053	.1104	.0009	19.69	.0007	.0027	.1237
#2	-.0004	51.03	.0030	.1106	.0010	19.68	.0006	.0027	.1234
#3	-.0005	50.76	.0025	.1100	.0010	19.48	.0006	.0029	.1233

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0131**	**6.680**	**1.562**	**3.153**	**.0197**	**.0005**	**.1956**	**.0219**	**.0346**
Stddev	.0001	.048	.028	.017	.0000	.0000	.0060	.0001	.0009
%RSD	1.068	.7166	1.764	.5228	.2137	4.574	3.071	.6078	2.587
#1	.0131	6.670	1.594	3.140	.0197	.0004	.1903	.0219	.0347
#2	.0130	6.733	1.548	3.171	.0198	.0005	.1943	.0218	.0337
#3	.0133	6.639	1.544	3.146	.0197	.0005	.2021	.0221	.0355

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0012**	**.0022**	**2.451**	**.0176**	**.2560**	**.2684**	**-.0041**	**.1055**	**.0149**
Stddev	.0011	.0007	.004	.0002	.0001	.0006	.0012	.0001	.0001
%RSD	93.16	29.99	.1428	1.419	.0524	.2411	30.61	.0478	.6859
#1	-.0025	.0017	2.449	.0176	.2558	.2685	-.0032	.1054	.0148
#2	-.0007	.0019	2.455	.0173	.2561	.2690	-.0035	.1055	.0148
#3	-.0004	.0029	2.450	.0178	.2560	.2677	-.0055	.1055	.0150

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2435.4**	**5399.1**	**43865.**	**3977.4**
Stddev	5.7	7.1	146.	30.7
%RSD	.23286	.13107	.33214	.77183
#1	2437.8	5403.6	43704.	3969.4
#2	2439.5	5390.9	43903.	3951.4
#3	2429.0	5402.6	43989.	4011.3

Zoom In Zoom Out

Sample Name: FA33973-3 Acquired: 5/20/2016 11:37:12 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	**-.0010**	**47.76**	**.0388**	**.3414**	**.0138**	**16.33**	**.0023**	**.0188**
Stddev	.0000	.16	.0001	.0008	.0001	.03	.0001	.0000
%RSD	3.687	.3268	.2919	.2479	.6644	.2094	2.337	.1584
#1	-.0010	47.59	.0387	.3404	.0137	16.30	.0024	.0188
#2	-.0011	47.89	.0389	.3418	.0138	16.34	.0023	.0188
#3	-.0010	47.80	.0389	.3419	.0138	16.36	.0023	.0188

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	**.0366**	**.0602**	**69.73**	**11.14**	**9.606**	**1.107**	**.0037**	**.2467**
Stddev	.0002	.0003	.15	.02	.010	.005	.0000	.0029
%RSD	.5594	.5639	.2147	.2093	.1044	.4284	.8232	1.169
#1	.0367	.0599	69.56	11.11	9.600	1.113	.0037	.2439
#2	.0364	.0606	69.84	11.15	9.618	1.105	.0037	.2497
#3	.0367	.0600	69.79	11.15	9.601	1.105	.0037	.2466

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	**.0326**	**.5478**	**-.0048**	**-.0016**	**.6130**	**.0108**	**.1111**	**.7929**
Stddev	.0001	.0015	.0001	.0003	.0008	.0001	.0004	.0023
%RSD	.2278	.2665	2.360	16.95	.1309	.9870	.3627	.2945
#1	.0326	.5494	-.0048	-.0018	.6131	.0107	.1106	.7948
#2	.0327	.5474	-.0046	-.0016	.6138	.0109	.1114	.7935
#3	.0325	.5466	-.0048	-.0013	.6122	.0107	.1112	.7903

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	F **-.0377**	**.0789**	**.2214**
Stddev	.0004	.0001	.0002
%RSD	1.139	.1839	.1001
#1	-.0379	.0790	.2216
#2	-.0372	.0788	.2212
#3	-.0380	.0789	.2214

7.4.7

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: FA33973-3 Acquired: 5/20/2016 11:37:12 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2258.8**	**27173.**	**220000.**	**20572.**
Stddev	3.3	35.	542.	6.
%RSD	.14765	.12994	.24630	.03082
#1	2255.9	27136.	219370.	20567.
#2	2258.2	27179.	220310.	20571.
#3	2262.4	27206.	220310.	20579.

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/20/2016 11:41:42 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2491**	**40.03**	**2.020**	**1.981**	**1.998**	**40.25**	**2.048**	**2.030**	**2.036**
Stddev	.0011	.14	.004	.011	.007	.06	.003	.001	.018
%RSD	.4232	.3377	.1766	.5761	.3568	.1511	.1675	.0654	.8678
#1	.2498	40.10	2.022	1.986	2.005	40.32	2.050	2.031	2.039
#2	.2496	39.87	2.023	1.968	1.991	40.22	2.044	2.029	2.053
#3	.2479	40.10	2.016	1.989	1.997	40.21	2.050	2.031	2.018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.988**	**41.40**	**39.88**	**40.05**	**2.064**	**2.029**	**40.17**	**2.046**	**2.015**
Stddev	.008	.09	.19	.07	.015	.002	.19	.005	.005
%RSD	.4112	.2261	.4687	.1630	.7429	.0926	.4714	.2332	.2721
#1	1.994	41.47	40.03	40.07	2.067	2.029	40.28	2.050	2.013
#2	1.991	41.30	39.67	39.98	2.078	2.027	39.95	2.040	2.011
#3	1.978	41.44	39.94	40.11	2.047	2.030	40.29	2.047	2.022
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.010**	**2.014**	**2.083**	**2.049**	**2.008**	**2.056**	**2.026**	**2.037**	**2.041**
Stddev	.002	.005	.003	.001	.008	.014	.006	.014	.006
%RSD	.0812	.2417	.1322	.0255	.3890	.6554	.3171	.7029	.3077
#1	2.008	2.011	2.082	2.049	2.013	2.059	2.021	2.038	2.041
#2	2.011	2.012	2.086	2.049	1.999	2.067	2.024	2.051	2.035
#3	2.010	2.020	2.080	2.048	2.013	2.041	2.033	2.023	2.048
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/20/2016 11:41:42 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2253.5**	**4664.2**	**37743.**	**3543.8**
Stddev	1.1	6.6	243.	8.0
%RSD	.04666	.14253	.64396	.22669
#1	2252.3	4658.1	37580.	3537.5
#2	2254.3	4663.1	37627.	3541.2
#3	2253.9	4671.3	38023.	3552.9

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/20/2016 11:45:54 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**.0000**	**.0001**	**.0000**	**.0000**	**.0087**	**.0003**	**.0002**	**.0004**
Stddev	.0003	.007	.0003	.0004	.0001	.0032	.0001	.0001	.0000
%RSD	1160.	16710.	216.8	1108.	357.2	37.34	25.46	68.60	2.899
#1	-.0001	-.0066	.0004	-.0003	.0000	.0052	.0003	.0004	.0004
#2	-.0002	.0072	.0003	.0003	.0000	.0116	.0003	.0001	.0004
#3	.0004	-.0007	-.0002	.0001	.0001	.0092	.0002	.0001	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005**	**.0122**	**-.0196**	**-.0405**	**.0004**	**.0002**	**.0088**	**.0002**	**.0000**
Stddev	.0003	.0025	.0329	.0216	.0000	.0004	.0075	.0002	.0001
%RSD	62.79	20.42	168.2	53.20	2.432	197.5	85.05	94.08	648.8
#1	.0008	.0114	-.0421	-.0471	.0004	.0006	.0002	.0004	.0000
#2	.0002	.0150	-.0349	-.0165	.0004	.0001	.0130	.0003	.0001
#3	.0005	.0102	.0182	-.0581	.0005	-.0001	.0132	.0000	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0006**	**.0005**	**.0012**	**.0001**	**.0000**	**.0004**	**-.0001**	**.0004**	**.0004**
Stddev	.0007	.0025	.0002	.0003	.000	.0001	.0005	.0002	.0001
%RSD	116.4	542.7	15.40	281.2	299.3	30.11	525.9	58.89	29.17
#1	.0004	.0025	.0014	.0002	-.0001	.0005	-.0002	.0001	.0006
#2	.0013	.0011	.0012	.0003	.0001	.0005	-.0005	.0005	.0004
#3	.0000	-.0023	.0010	-.0002	.0000	.0003	.0004	.0005	.0003
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/20/2016 11:45:54 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2598.8**	**4809.5**	**39133.**	**3553.2**
Stddev	4.8	3.3	156.	9.6
%RSD	.18346	.06762	.39937	.27114
#1	2600.0	4806.9	39300.	3555.0
#2	2602.9	4813.1	38990.	3542.8
#3	2593.6	4808.4	39109.	3561.8

Zoom In Zoom Out

Sample Name: FA34023-1 Acquired: 5/20/2016 11:50:27 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0002**	**135.6**	**.0647**	**.6794**	**.0054**	F **1562.**	**.0044**	**.0640**	**.1956**
Stddev	.0004	.1	.0007	.0010	.0001	9.	.0002	.0001	.0003
%RSD	289.7	.1092	1.082	.1491	1.118	.6010	3.732	.1099	.1680
#1	-.0001	135.4	.0640	.6782	.0054	1551.	.0046	.0640	.1956
#2	-.0001	135.7	.0654	.6798	.0055	1564.	.0043	.0640	.1952
#3	.0007	135.7	.0648	.6801	.0054	1570.	.0044	.0639	.1959

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.1087**	**201.1**	**10.58**	**123.0**	**3.116**	**.0075**	**3.780**	**.1377**	**.1829**
Stddev	.0002	.4	.03	.2	.013	.0003	.021	.0003	.0011
%RSD	.2030	.1939	.3269	.1464	.4210	3.964	.5669	.2390	.6195
#1	.1088	200.7	10.59	123.0	3.114	.0079	3.772	.1376	.1823
#2	.1089	201.5	10.54	123.2	3.130	.0073	3.805	.1376	.1821
#3	.1085	201.2	10.61	122.9	3.104	.0075	3.764	.1381	.1842

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0038**	**.0104**	**2.577**	**.0159**	**2.447**	**.6033**	**-.0030**	**.2497**	**.5277**
Stddev	.0010	.0005	.003	.0001	.004	.0006	.0015	.0004	.0009
%RSD	27.04	4.433	.1115	.4797	.1411	.1006	49.32	.1778	.1632
#1	-.0049	.0104	2.579	.0158	2.447	.6036	-.0013	.2496	.5270
#2	-.0036	.0108	2.574	.0159	2.451	.6026	-.0036	.2494	.5287
#3	-.0029	.0099	2.579	.0159	2.444	.6036	-.0041	.2502	.5274

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1818.6**	**5174.7**	**41783.**	**4090.4**
Stddev	4.4	17.7	97.	22.3
%RSD	.24281	.34187	.23143	.54503
#1	1815.6	5157.9	41863.	4115.5
#2	1823.7	5193.1	41675.	4082.5
#3	1816.5	5173.0	41810.	4073.0

Zoom In Zoom Out

Sample Name: FA33933-1 Acquired: 5/20/2016 11:55:01 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0079**	**24.50**	**.0753**	F **86.49**	**-.0044**	**140.1**	**.0678**	**.0130**	F **134.2**
Stddev	.0041	.28	.0087	.68	.0005	.5	.0003	.0010	1.1
%RSD	51.89	1.148	11.51	.7892	11.13	.3287	.4671	7.447	.7947
#1	.0049	24.55	.0660	87.01	-.0047	140.4	.0676	.0128	133.1
#2	.0062	24.76	.0767	85.72	-.0047	140.3	.0682	.0140	135.2
#3	.0125	24.20	.0831	86.74	-.0039	139.5	.0676	.0121	134.4

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.4670**	**183.9**	**1.255**	**4.839**	**1.324**	**36.90**	**4.532**	**.0168**	F **654.9**
Stddev	.0052	.7	.217	.039	.012	.03	.062	.0005	.7
%RSD	1.107	.3744	17.30	.7963	.9261	.0733	1.373	2.915	.1003
#1	.4722	183.8	1.491	4.837	1.312	36.89	4.600	.0172	654.8
#2	.4668	184.7	1.063	4.879	1.337	36.93	4.479	.0162	655.6
#3	.4619	183.3	1.213	4.802	1.324	36.89	4.516	.0169	654.3

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**3.719**	**.0584**	**2.872**	**6.008**	**1.546**	**.4289**	**-.0402**	**.3942**	F **683.8**
Stddev	.016	.0094	.012	.008	.006	.0043	.0152	.0019	11.6
%RSD	.4235	16.12	.4331	.1373	.3767	.9979	37.84	.4789	1.689
#1	3.707	.0692	2.887	6.003	1.540	.4256	-.0519	.3958	686.5
#2	3.713	.0543	2.866	6.017	1.551	.4338	-.0230	.3947	671.2
#3	3.737	.0518	2.864	6.003	1.547	.4275	-.0457	.3921	693.8

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2397.8**	**4319.2**	**39703.**	**3581.3**
Stddev	2.6	5.0	344.	10.4
%RSD	.10776	.11529	.86629	.29045
#1	2396.2	4318.6	40040.	3575.3
#2	2396.4	4314.5	39352.	3575.3
#3	2400.8	4324.4	39716.	3593.3

Zoom In Zoom Out

Sample Name: FA33933-2 Acquired: 5/20/2016 11:59:36 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0046**	**22.25**	**.0507**	F **93.34**	**-.0043**	**136.8**	**.0324**	**-.0098**	F **111.2**
Stddev	.0017	.11	.0105	.52	.0005	.4	.0005	.0009	1.8
%RSD	36.96	.5093	20.62	.5597	11.11	.3107	1.589	9.297	1.614
#1	.0026	22.23	.0390	93.11	-.0045	136.8	.0323	-.0099	110.6
#2	.0054	22.15	.0591	92.97	-.0037	136.3	.0319	-.0088	113.2
#3	.0057	22.37	.0541	93.94	-.0046	137.2	.0329	-.0107	109.8

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.1696**	**39.77**	**.9179**	**5.616**	**.6015**	**30.73**	**4.071**	**-.0009**	F **529.6**
Stddev	.0016	.08	.2468	.251	.0099	.08	.045	.0012	1.3
%RSD	.9331	.2092	26.89	4.469	1.642	.2512	1.105	125.0	.2430
#1	.1696	39.79	1.200	5.326	.5997	30.67	4.028	-.0014	530.3
#2	.1711	39.69	.7391	5.754	.6121	30.81	4.068	.0004	530.3
#3	.1680	39.85	.8150	5.767	.5926	30.70	4.118	-.0018	528.1

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**2.501**	**.0415**	**2.846**	**4.925**	**1.808**	**.4415**	**-.0404**	**.3390**	F **289.1**
Stddev	.030	.0071	.017	.005	.011	.0050	.0074	.0009	1.0
%RSD	1.219	17.05	.5945	.1123	.6070	1.143	18.21	.2769	.3589
#1	2.523	.0338	2.827	4.931	1.807	.4388	-.0350	.3387	288.6
#2	2.466	.0477	2.859	4.920	1.797	.4474	-.0488	.3401	288.3
#3	2.513	.0432	2.854	4.925	1.819	.4385	-.0376	.3383	290.2

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2422.5**	**4376.8**	**39308.**	**3606.1**
Stddev	3.2	9.6	462.	16.3
%RSD	.13413	.21916	1.1745	.45107
#1	2422.4	4385.3	39462.	3597.0
#2	2419.4	4366.4	38789.	3624.9
#3	2425.9	4378.6	39673.	3596.5

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: FA33933-3 Acquired: 5/20/2016 12:04:14 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0019**	**40.24**	**-.0007**	**F 96.81**	**-.0042**	**111.1**	**.0848**	**-.0057**	**3.156**
Stddev	.0025	.11	.0037	1.18	.0002	1.1	.0003	.0010	.004
%RSD	132.1	.2681	525.0	1.221	3.820	.9875	.3849	16.75	.1294
#1	.0023	40.31	-.0009	96.13	-.0040	112.1	.0847	-.0047	3.160
#2	-.0008	40.30	.0031	96.13	-.0043	111.4	.0852	-.0059	3.152
#3	.0042	40.12	-.0043	98.18	-.0041	109.9	.0845	-.0066	3.156

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.4483**	**17.95**	**.9468**	**9.057**	**.5153**	**.2718**	**8.747**	**.0322**	**16.10**
Stddev	.0039	.12	.0967	.082	.0015	.0038	.090	.0024	.04
%RSD	.8658	.6619	10.21	.9071	.2983	1.399	1.027	7.588	.2353
#1	.4525	18.09	.9099	9.120	.5153	.2757	8.802	.0340	16.13
#2	.4448	17.88	.8741	9.088	.5138	.2716	8.795	.0294	16.12
#3	.4476	17.89	1.057	8.964	.5169	.2681	8.643	.0332	16.06

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0038**	**.0075**	**1.578**	**.2767**	**1.612**	**.9912**	**-.0006**	**.0278**	**F 305.9**
Stddev	.0059	.0113	.006	.0029	.015	.0043	.0066	.0017	1.9
%RSD	152.6	150.6	.3908	1.042	.9074	.4358	1084.	6.041	.6297
#1	.0016	.0203	1.572	.2795	1.624	.9946	-.0001	.0262	308.1
#2	.0105	.0030	1.578	.2737	1.615	.9864	.0058	.0278	305.0
#3	-.0006	-.0008	1.584	.2770	1.596	.9927	-.0075	.0295	304.5

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2570.0**	**4804.2**	**39452.**	**3625.4**
Stddev	7.1	12.0	98.	25.2
%RSD	.27456	.25047	.24877	.69552
#1	2561.9	4798.8	39356.	3616.2
#2	2574.7	4818.0	39552.	3606.1
#3	2573.5	4795.8	39447.	3654.0

Zoom In Zoom Out

Sample Name: MP30375-MB1 Acquired: 5/20/2016 12:08:54 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0002**	**-.0160**	**-.0011**	**.0004**	**-.0004**	**.0089**	**-.0002**	**-.0003**	**.0001**
Stddev	.0000	.0090	.0003	.0002	.0001	.0010	.0000	.0000	.0001
%RSD	13.14	56.48	29.13	46.74	13.07	11.24	15.06	4.045	91.81
#1	-.0002	-.0116	-.0008	.0006	-.0004	.0079	-.0002	-.0003	.0002
#2	-.0003	-.0264	-.0015	.0002	-.0003	.0099	-.0002	-.0003	.0001
#3	-.0002	-.0100	-.0011	.0004	-.0004	.0091	-.0002	-.0003	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**-.0166**	**-.0250**	**-.0344**	**-.0002**	**-.0007**	**.0157**	**-.0003**	**.0000**
Stddev	.000	.0010	.0072	.0059	.0000	.0000	.0098	.0001	.0004
%RSD	1357.	5.841	28.92	17.13	7.762	5.142	62.15	40.93	969.4
#1	.0002	-.0155	-.0171	-.0308	-.0002	-.0007	.0159	-.0003	.0002
#2	.0000	-.0174	-.0267	-.0313	-.0002	-.0006	.0058	-.0004	.0004
#3	-.0002	-.0168	-.0312	-.0412	-.0002	-.0007	.0253	-.0002	-.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0008**	**.0015**	**.0106**	**-.0003**	**-.0005**	**-.0010**	**-.0015**	**-.0002**	**.0029**
Stddev	.0004	.0008	.0003	.0003	.0001	.0000	.0005	.0002	.0005
%RSD	51.29	53.40	2.458	98.22	15.20	4.441	34.78	142.7	17.65
#1	-.0012	.0008	.0103	-.0003	-.0005	-.0010	-.0022	-.0004	.0034
#2	-.0006	.0013	.0107	-.0007	-.0004	-.0010	-.0012	.0000	.0028
#3	-.0005	.0024	.0108	.0000	-.0005	-.0010	-.0013	.0000	.0024
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: MP30375-MB1 Acquired: 5/20/2016 12:08:54 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2616.1**	**4802.1**	**39697.**	**3606.6**
Stddev	4.8	16.9	87.	8.6
%RSD	.18476	.35117	.22003	.23903
#1	2620.5	4820.4	39618.	3600.2
#2	2616.9	4787.1	39790.	3603.2
#3	2610.9	4798.9	39682.	3616.4

Zoom In Zoom Out

Sample Name: MP30375-B1 Acquired: 5/20/2016 12:13:26 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0476**	**27.14**	**2.052**	**2.067**	**.0530**	**25.65**	**.0531**	**.5223**	**.2119**
Stddev	.0005	.27	.008	.021	.0005	.21	.0002	.0012	.0019
%RSD	1.053	.9972	.4022	1.012	.9673	.8294	.3604	.2228	.8809
#1	.0479	27.32	2.060	2.084	.0533	25.75	.0532	.5231	.2110
#2	.0478	27.27	2.051	2.073	.0533	25.78	.0532	.5229	.2107
#3	.0470	26.83	2.044	2.043	.0524	25.40	.0529	.5210	.2141
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2607**	**26.34**	**24.97**	**25.07**	**.5425**	**.4982**	**25.59**	**.5385**	**.5024**
Stddev	.0025	.28	.33	.21	.0033	.0017	.24	.0017	.0020
%RSD	.9448	1.049	1.323	.8453	.6067	.3488	.9189	.3102	.3894
#1	.2589	26.47	25.23	25.19	.5399	.4990	25.75	.5388	.5044
#2	.2635	26.53	25.09	25.18	.5413	.4993	25.71	.5399	.5022
#3	.2597	26.02	24.60	24.82	.5462	.4962	25.32	.5367	.5005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5157**	**2.041**	**.0301**	**.5120**	**.4947**	**.5148**	**2.032**	**.4959**	**.5226**
Stddev	.0009	.006	.0023	.0024	.0055	.0025	.004	.0028	.0015
%RSD	.1748	.2981	7.725	.4682	1.106	.4792	.2107	.5658	.2948
#1	.5167	2.048	.0328	.5133	.4976	.5121	2.035	.4929	.5234
#2	.5155	2.038	.0290	.5134	.4982	.5152	2.034	.4962	.5235
#3	.5150	2.036	.0285	.5092	.4884	.5170	2.027	.4985	.5208
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: MP30375-B1 Acquired: 5/20/2016 12:13:26 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2347.1**	**4640.0**	**37715.**	**3486.4**
Stddev	5.8	8.9	228.	31.1
%RSD	.24729	.19254	.60541	.89285
#1	2343.5	4631.7	37874.	3453.5
#2	2344.1	4638.9	37819.	3490.5
#3	2353.8	4649.5	37454.	3515.3

Zoom In Zoom Out

Sample Name: FA34064-1 Acquired: 5/20/2016 12:17:40 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0001**	**.0254**	**-.0011**	**.0092**	**-.0004**	**77.28**	**-.0002**	**.0000**	**.0004**
Stddev	.0001	.0057	.0005	.0003	.0000	.17	.0001	.000	.0001
%RSD	229.4	22.47	50.24	3.355	10.30	.2211	30.99	249.0	31.76
#1	.0000	.0273	-.0013	.0090	-.0004	77.20	-.0002	-.0002	.0003
#2	.0002	.0300	-.0015	.0095	-.0004	77.48	-.0002	.0000	.0005
#3	-.0001	.0190	-.0005	.0090	-.0004	77.16	-.0001	.0000	.0004

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0015**	**.0123**	**1.385**	**.8872**	**.0009**	**.0001**	**3.169**	**-.0001**	**-.0003**
Stddev	.0002	.0015	.046	.0151	.0000	.0001	.005	.0001	.0008
%RSD	15.34	12.54	3.315	1.702	3.779	81.96	.1630	205.4	235.3
#1	.0016	.0138	1.418	.8727	.0009	.0003	3.172	-.0001	-.0003
#2	.0013	.0125	1.405	.8862	.0009	.0001	3.172	-.0002	-.0011
#3	.0018	.0107	1.333	.9028	.0009	.0001	3.163	.0001	.0004

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0003**	**.0031**	**.6501**	**-.0001**	**.4146**	**.0005**	**-.0017**	**.0008**	**.0058**
Stddev	.0003	.0010	.0013	.0004	.0016	.0001	.0007	.0002	.0001
%RSD	93.43	31.52	.1942	822.8	.3808	21.52	42.27	21.66	.9762
#1	.0006	.0040	.6514	.0005	.4134	.0005	-.0010	.0009	.0058
#2	.0004	.0032	.6489	-.0004	.4164	.0006	-.0017	.0006	.0059
#3	.0000	.0021	.6501	-.0003	.4140	.0004	-.0025	.0008	.0058

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2422.7**	**4557.7**	**37498.**	**3554.9**
Stddev	10.6	17.1	511.	7.7
%RSD	.43593	.37586	1.3627	.21556
#1	2412.5	4538.5	37857.	3563.1
#2	2422.1	4563.1	37724.	3553.5
#3	2433.6	4571.5	36913.	3548.0

Zoom In Zoom Out

Sample Name: MP30375-D1 Acquired: 5/20/2016 12:22:10 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0002**	**.0198**	**-.0015**	**.0087**	**-.0005**	**78.38**	**-.0001**	**-.0001**	**.0004**
Stddev	.0005	.0024	.0007	.0003	.0000	.15	.0000	.0000	.0002
%RSD	323.3	12.16	48.06	2.933	5.318	.1870	8.050	19.84	47.29
#1	-.0007	.0191	-.0022	.0086	-.0005	78.48	-.0001	-.0001	.0004
#2	.0003	.0179	-.0007	.0085	-.0005	78.21	-.0002	-.0001	.0002
#3	-.0001	.0225	-.0018	.0090	-.0004	78.44	-.0001	-.0001	.0006

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0016**	**.0061**	**1.419**	**.9033**	**.0009**	**-.0001**	**3.211**	**-.0002**	**-.0002**
Stddev	.0001	.0012	.022	.0134	.0000	.0000	.021	.0002	.0004
%RSD	6.702	20.06	1.537	1.478	2.977	5.043	.6605	130.8	163.5
#1	.0017	.0062	1.394	.9148	.0009	-.0001	3.204	-.0002	-.0007
#2	.0017	.0048	1.434	.9063	.0009	-.0001	3.195	-.0003	-.0002
#3	.0015	.0072	1.429	.8887	.0009	-.0002	3.235	.0001	.0001

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0011**	**.0036**	**.6504**	**.0002**	**.4208**	**.0002**	**-.0017**	**.0009**	**.0060**
Stddev	.0009	.0004	.0006	.0002	.0026	.0001	.0002	.0002	.0000
%RSD	86.50	10.91	.0985	118.7	.6247	26.11	11.88	28.82	.5961
#1	-.0010	.0037	.6505	.0004	.4206	.0001	-.0019	.0007	.0060
#2	-.0020	.0032	.6510	.0001	.4182	.0002	-.0015	.0011	.0061
#3	-.0002	.0040	.6497	.0000	.4235	.0002	-.0016	.0007	.0060

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2455.2**	**4623.0**	**37801.**	**3553.4**
Stddev	3.5	3.6	87.	15.9
%RSD	.14164	.07775	.23060	.44749
#1	2451.3	4619.8	37851.	3535.1
#2	2456.3	4626.9	37851.	3564.2
#3	2458.0	4622.4	37700.	3560.9

Zoom In Zoom Out

Sample Name: MP30375-SD1 Acquired: 5/20/2016 12:26:41 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0003**	**-.0347**	**-.0058**	**.0054**	**-.0019**	**72.71**	**-.0007**	**-.0009**	**.0000**
Stddev	.0013	.0423	.0007	.0015	.0004	.19	.0001	.0004	.0008
%RSD	471.0	121.8	12.01	28.58	20.20	.2575	13.85	45.68	5778.
#1	.0009	-.0835	-.0061	.0037	-.0015	72.52	-.0006	-.0005	.0009
#2	-.0001	-.0114	-.0050	.0067	-.0018	72.89	-.0007	-.0009	-.0003
#3	-.0016	-.0092	-.0063	.0058	-.0023	72.72	-.0008	-.0012	-.0005

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0018**	**-.0827**	**1.244**	**.6152**	**-.0001**	**-.0061**	**3.028**	**-.0002**	**-.0007**
Stddev	.0008	.0090	.039	.1422	.0001	.0005	.020	.0001	.0012
%RSD	46.75	10.84	3.098	23.11	114.8	8.624	.6503	72.37	167.3
#1	.0027	-.0925	1.270	.4980	-.0001	-.0061	3.009	-.0003	-.0011
#2	.0012	-.0807	1.200	.5743	.0000	-.0067	3.027	-.0001	.0006
#3	.0014	-.0749	1.263	.7734	-.0002	-.0056	3.048	-.0001	-.0017

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0046**	**.0017**	**.6100**	**-.0028**	**.3875**	**-.0025**	**-.0024**	**.0002**	**.0380**
Stddev	.0017	.0020	.0028	.0014	.0029	.0002	.0072	.0006	.0003
%RSD	36.58	115.7	.4512	48.29	.7504	9.696	298.2	274.7	.6878
#1	-.0035	.0039	.6100	-.0036	.3862	-.0026	.0037	.0008	.0379
#2	-.0066	.0002	.6128	-.0037	.3855	-.0026	-.0006	.0000	.0379
#3	-.0038	.0010	.6072	-.0012	.3909	-.0022	-.0104	-.0003	.0383

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2611.4**	**4808.9**	**39496.**	**3641.3**
Stddev	3.6	7.8	139.	31.5
%RSD	.13858	.16203	.35225	.86451
#1	2614.5	4804.4	39521.	3677.3
#2	2612.2	4817.9	39621.	3618.9
#3	2607.4	4804.4	39346.	3627.8

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: MP30375-PS1 Acquired: 5/20/2016 12:31:12 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0495**	**2.647**	**.1091**	**.2751**	**.0532**	**81.38**	**.0547**	**.0544**	**.0560**
Stddev	.0007	.004	.0006	.0005	.0002	.33	.0004	.0004	.0001
%RSD	1.396	.1405	.5697	.1776	.4187	.4076	.6957	.8222	.1275
#1	.0488	2.646	.1092	.2756	.0535	81.27	.0551	.0549	.0561
#2	.0496	2.651	.1096	.2746	.0532	81.75	.0546	.0544	.0560
#3	.0501	2.644	.1084	.2753	.0531	81.11	.0543	.0540	.0560

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.1114**	**3.136**	**11.59**	**6.039**	**.0583**	**.1047**	**13.75**	**.1102**	**.0506**
Stddev	.0005	.014	.01	.038	.0000	.0009	.04	.0011	.0008
%RSD	.4164	.4297	.0915	.6241	.0763	.8518	.2909	.9667	1.661
#1	.1110	3.133	11.59	6.080	.0583	.1057	13.71	.1114	.0515
#2	.1119	3.151	11.61	6.028	.0582	.1045	13.79	.1100	.0498
#3	.1113	3.124	11.59	6.007	.0582	.1040	13.74	.1093	.0504

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.1129**	**.1066**	**.6518**	**.0510**	**.4605**	**.1103**	**.1024**	**.0534**	**.2818**
Stddev	.0014	.0007	.0052	.0006	.0018	.0003	.0015	.0004	.0022
%RSD	1.217	.6250	.7949	1.087	.3977	.2644	1.482	.8349	.7749
#1	.1145	.1073	.6578	.0516	.4626	.1101	.1035	.0528	.2835
#2	.1119	.1061	.6492	.0510	.4598	.1106	.1030	.0536	.2826
#3	.1123	.1063	.6485	.0505	.4591	.1101	.1007	.0536	.2793

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2384.7**	**4603.6**	**37445.**	**3524.9**
Stddev	14.8	37.0	117.	39.1
%RSD	.62143	.80379	.31176	1.1094
#1	2369.2	4561.4	37402.	3527.3
#2	2386.1	4619.1	37355.	3484.7
#3	2398.7	4630.3	37577.	3562.8

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/20/2016 12:35:29 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2485**	**39.75**	**2.060**	**1.960**	**2.011**	**39.78**	**2.073**	**2.045**	**2.055**
Stddev	.0012	.17	.005	.010	.009	.18	.003	.002	.009
%RSD	.4945	.4254	.2524	.4898	.4631	.4458	.1581	.1195	.4355
#1	.2492	39.59	2.058	1.949	2.000	39.66	2.070	2.043	2.052
#2	.2492	39.93	2.056	1.966	2.018	39.98	2.072	2.044	2.066
#3	.2471	39.75	2.066	1.966	2.014	39.68	2.077	2.048	2.049
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.981**	**41.39**	**39.52**	**39.71**	**2.102**	**2.049**	**40.49**	**2.079**	**2.022**
Stddev	.004	.22	.27	.07	.009	.003	.17	.002	.007
%RSD	.2225	.5193	.6757	.1822	.4217	.1676	.4307	.0788	.3269
#1	1.981	41.17	39.21	39.64	2.099	2.045	40.29	2.077	2.014
#2	1.985	41.59	39.68	39.78	2.112	2.049	40.61	2.080	2.025
#3	1.976	41.42	39.66	39.72	2.095	2.052	40.58	2.079	2.026
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.044**	**2.046**	**2.121**	**2.060**	**1.990**	**2.092**	**2.047**	**2.071**	**2.046**
Stddev	.004	.005	.003	.004	.006	.007	.005	.004	.005
%RSD	.2127	.2419	.1263	.2004	.2937	.3340	.2424	.1899	.2520
#1	2.045	2.047	2.118	2.056	1.983	2.089	2.042	2.075	2.041
#2	2.039	2.040	2.121	2.063	1.992	2.099	2.049	2.072	2.046
#3	2.048	2.050	2.123	2.063	1.995	2.086	2.051	2.067	2.051
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/20/2016 12:35:29 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2236.9**	**4586.0**	**37202.**	**3525.0**
Stddev	2.2	5.1	210.	11.8
%RSD	.09613	.11087	.56509	.33379
#1	2236.7	4582.8	37182.	3527.9
#2	2239.2	4591.9	37002.	3512.0
#3	2234.9	4583.4	37421.	3535.0

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/20/2016 12:39:41 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**-.0069**	**-.0003**	**-.0001**	**.0002**	**.0116**	**.0002**	**.0001**	**.0004**
Stddev	.0002	.0021	.0007	.0004	.0000	.0037	.0001	.0001	.0002
%RSD	108.6	30.75	272.5	554.7	19.01	31.94	28.30	123.8	57.55
#1	.0000	-.0047	-.0005	.0003	.0002	.0094	.0003	.0001	.0001
#2	.0002	-.0089	.0005	-.0001	.0002	.0159	.0002	.0002	.0004
#3	.0003	-.0069	-.0008	-.0005	.0001	.0096	.0002	.0000	.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0006**	**.0074**	**.0302**	**-.0177**	**.0003**	**.0004**	**.0305**	**.0002**	**.0001**
Stddev	.0002	.0008	.0347	.0069	.0000	.0003	.0090	.0001	.0002
%RSD	32.08	11.02	114.7	39.15	15.37	67.90	29.54	77.60	352.3
#1	.0005	.0082	.0044	-.0098	.0003	.0008	.0311	.0003	-.0001
#2	.0009	.0076	.0696	-.0225	.0004	.0003	.0392	.0002	.0000
#3	.0006	.0065	.0167	-.0208	.0003	.0002	.0212	.0000	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0008**	**.0002**	**.0015**	**.0000**	**.0002**	**.0004**	**.0000**	**.0004**	**.0005**
Stddev	.0005	.0019	.0002	.000	.0000	.0001	.001	.0001	.0001
%RSD	64.86	1236.	13.13	596.2	21.40	31.17	4870.	24.90	20.45
#1	.0011	-.0015	.0015	.0001	.0002	.0005	-.0006	.0004	.0006
#2	.0010	.0022	.0017	-.0001	.0002	.0004	.0003	.0005	.0004
#3	.0002	-.0003	.0013	-.0001	.0002	.0003	.0003	.0003	.0005
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

7.4.7

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/20/2016 12:39:41 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2649.3**	**4864.0**	**39619.**	**3613.3**
Stddev	1.5	7.9	85.	28.2
%RSD	.05705	.16244	.21555	.78018
#1	2647.8	4865.3	39532.	3640.3
#2	2649.4	4871.2	39703.	3615.5
#3	2650.8	4855.5	39624.	3584.0

Zoom In Zoom Out

Sample Name: MP30375-S1 Acquired: 5/20/2016 12:44:13 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0484**	**27.05**	**2.064**	**2.058**	**.0531**	**104.3**	**.0524**	**.5138**	**.2113**
Stddev	.0004	.08	.004	.004	.0004	.6	.0003	.0015	.0005
%RSD	.9195	.2813	.2058	.1782	.6989	.6044	.5007	.2989	.2286
#1	.0485	27.07	2.065	2.057	.0529	104.7	.0526	.5134	.2112
#2	.0479	27.11	2.059	2.062	.0535	104.5	.0521	.5124	.2119
#3	.0487	26.97	2.067	2.055	.0528	103.6	.0524	.5154	.2110

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.2661**	**26.04**	**26.53**	**25.64**	**.5434**	**.4991**	**28.89**	**.5296**	**.5022**
Stddev	.0012	.10	.01	.17	.0019	.0012	.06	.0015	.0006
%RSD	.4407	.3943	.0359	.6563	.3510	.2330	.2111	.2815	.1277
#1	.2674	26.15	26.52	25.70	.5416	.4992	28.94	.5293	.5024
#2	.2657	26.05	26.52	25.77	.5454	.4978	28.91	.5284	.5014
#3	.2652	25.94	26.54	25.45	.5432	.5002	28.82	.5313	.5026

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.5220**	**2.054**	**.6700**	**.5067**	**.9135**	**.5218**	**2.021**	**.4988**	**.5183**
Stddev	.0014	.014	.0023	.0011	.0019	.0005	.006	.0004	.0015
%RSD	.2754	.6751	.3441	.2230	.2042	.0945	.2960	.0837	.2872
#1	.5223	2.052	.6706	.5061	.9138	.5219	2.027	.4991	.5169
#2	.5205	2.041	.6674	.5061	.9152	.5213	2.015	.4983	.5181
#3	.5233	2.069	.6719	.5080	.9115	.5223	2.021	.4989	.5199

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2254.8**	**4548.1**	**36938.**	**3453.9**
Stddev	2.8	10.4	37.	24.3
%RSD	.12549	.22886	.10010	.70459
#1	2256.6	4551.2	36908.	3433.9
#2	2256.2	4556.6	36979.	3446.7
#3	2251.5	4536.5	36926.	3481.0

Zoom In Zoom Out

Sample Name: MP30375-S2 Acquired: 5/20/2016 12:48:25 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0481**	**27.23**	**2.048**	**2.068**	**.0533**	**104.3**	**.0518**	**.5087**	**.2086**
Stddev	.0004	.02	.003	.003	.0003	.1	.0002	.0008	.0007
%RSD	.7817	.0899	.1301	.1483	.5080	.0832	.3051	.1558	.3241
#1	.0481	27.21	2.050	2.072	.0530	104.3	.0520	.5096	.2078
#2	.0477	27.25	2.045	2.067	.0532	104.2	.0518	.5084	.2092
#3	.0484	27.25	2.049	2.066	.0536	104.4	.0517	.5082	.2088

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.2600**	**26.15**	**26.65**	**25.70**	**.5360**	**.4938**	**29.03**	**.5234**	**.4964**
Stddev	.0007	.12	.02	.05	.0023	.0009	.03	.0013	.0031
%RSD	.2721	.4407	.0809	.1936	.4228	.1897	.0964	.2516	.6161
#1	.2595	26.03	26.67	25.65	.5334	.4943	29.02	.5239	.4999
#2	.2608	26.15	26.65	25.71	.5377	.4944	29.06	.5244	.4955
#3	.2597	26.26	26.63	25.75	.5369	.4927	29.02	.5219	.4940

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.5167**	**2.036**	**.6619**	**.5019**	**.9185**	**.5141**	**2.005**	**.4917**	**.5120**
Stddev	.0009	.006	.0011	.0009	.0010	.0015	.006	.0034	.0008
%RSD	.1716	.2997	.1616	.1761	.1128	.2959	.3119	.6874	.1560
#1	.5172	2.043	.6629	.5029	.9196	.5125	2.007	.4878	.5129
#2	.5157	2.032	.6621	.5012	.9182	.5155	2.011	.4933	.5114
#3	.5173	2.033	.6608	.5016	.9176	.5144	1.999	.4940	.5117

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2270.3**	**4577.5**	**37247.**	**3439.6**
Stddev	6.5	6.8	92.	15.1
%RSD	.28521	.14953	.24783	.43828
#1	2264.9	4573.5	37314.	3457.0
#2	2268.6	4573.6	37141.	3431.7
#3	2277.5	4585.4	37284.	3430.2

Zoom In Zoom Out

Sample Name: FA34064-2 Acquired: 5/20/2016 12:52:37 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0003**	**.0328**	**.0000**	**.0096**	**-.0004**	**93.72**	**-.0001**	**-.0002**	**.0006**
Stddev	.0002	.0117	.0007	.0001	.0000	.34	.0000	.0001	.0006
%RSD	63.23	35.79	2342.	1.230	4.210	.3631	9.146	64.35	97.03
#1	-.0004	.0451	-.0006	.0097	-.0004	93.63	-.0002	.0000	.0003
#2	-.0003	.0314	-.0001	.0096	-.0004	93.43	-.0001	-.0002	.0013
#3	-.0001	.0218	.0008	.0095	-.0004	94.10	-.0002	-.0002	.0002

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0151**	**.1320**	**1.923**	**.7468**	**.0034**	**.0002**	**3.772**	**.0000**	**.0005**
Stddev	.0001	.0024	.062	.0024	.0000	.0001	.006	.0002	.0004
%RSD	.8113	1.785	3.219	.3257	.7110	32.09	.1590	358.1	72.49
#1	.0150	.1311	1.966	.7440	.0034	.0001	3.767	-.0002	.0002
#2	.0152	.1346	1.952	.7477	.0034	.0002	3.769	.0002	.0004
#3	.0151	.1302	1.852	.7487	.0034	.0002	3.778	.0001	.0010

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0012**	**.0034**	**.8184**	**.0006**	**.7096**	**.0006**	**-.0012**	**.0024**	**.0129**
Stddev	.0007	.0017	.0013	.0001	.0025	.0001	.0006	.0001	.0000
%RSD	55.62	48.85	.1531	16.74	.3456	11.84	48.81	4.681	.0910
#1	-.0016	.0022	.8171	.0007	.7093	.0006	-.0006	.0023	.0129
#2	-.0004	.0026	.8183	.0006	.7074	.0006	-.0015	.0023	.0129
#3	-.0015	.0053	.8196	.0005	.7122	.0005	-.0017	.0025	.0129

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2379.2**	**4528.8**	**36647.**	**3478.0**
Stddev	3.8	10.7	115.	6.0
%RSD	.16160	.23632	.31363	.17314
#1	2383.1	4541.0	36651.	3484.9
#2	2375.4	4520.9	36760.	3475.1
#3	2379.1	4524.5	36530.	3473.9

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: FA34064-3 Acquired: 5/20/2016 12:57:07 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0000**	**.7024**	**.0009**	**.0110**	**-.0004**	**100.8**	**-.0002**	**.0005**	**.0028**
Stddev	.0003	.0063	.0010	.0002	.0000	.8	.0000	.0000	.0003
%RSD	759.3	.8975	104.4	1.484	1.138	.8108	16.57	1.310	11.57
#1	-.0003	.6995	.0013	.0111	-.0004	101.2	-.0002	.0005	.0029
#2	.0003	.6981	.0016	.0108	-.0004	99.85	-.0002	.0005	.0030
#3	.0001	.7097	-.0002	.0110	-.0004	101.3	-.0002	.0005	.0024

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0506**	**1.994**	**1.037**	**.8556**	**.0125**	**-.0004**	**3.540**	**.0018**	**.0067**
Stddev	.0002	.017	.018	.0121	.0001	.0002	.041	.0001	.0006
%RSD	.3259	.8648	1.718	1.413	1.011	51.59	1.156	3.603	8.641
#1	.0507	2.011	1.053	.8421	.0124	-.0002	3.577	.0017	.0067
#2	.0505	1.977	1.018	.8654	.0127	-.0005	3.496	.0018	.0061
#3	.0505	1.994	1.041	.8594	.0125	-.0006	3.548	.0018	.0073

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0010**	**.0018**	**1.345**	**.0001**	**.5223**	**.0110**	**-.0021**	**.0007**	**.0415**
Stddev	.0012	.0024	.005	.0003	.0066	.0008	.0004	.0001	.0002
%RSD	111.6	134.0	.3730	277.4	1.272	7.188	20.76	8.077	.4740
#1	-.0001	.0044	1.341	-.0002	.5290	.0102	-.0026	.0007	.0414
#2	-.0023	.0011	1.344	.0004	.5157	.0118	-.0017	.0008	.0418
#3	-.0007	-.0002	1.351	.0002	.5222	.0110	-.0021	.0007	.0414

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2398.5**	**4597.1**	**37951.**	**3572.4**
Stddev	8.7	6.9	210.	25.7
%RSD	.36080	.14963	.55332	.71964
#1	2401.0	4603.2	38168.	3561.0
#2	2388.8	4589.6	37749.	3601.8
#3	2405.6	4598.6	37937.	3554.3

Zoom In Zoom Out

Sample Name: FA34064-4 Acquired: 5/20/2016 13:01:35 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0001**	**.0468**	**-.0008**	**.0205**	**-.0004**	**99.96**	**-.0001**	**-.0002**	**.0009**
Stddev	.0002	.0090	.0002	.0003	.0000	.24	.0000	.0000	.0001
%RSD	347.2	19.13	26.77	1.451	5.042	.2409	3.354	22.76	11.56
#1	.0002	.0472	-.0007	.0209	-.0004	99.86	-.0001	-.0003	.0010
#2	.0001	.0556	-.0010	.0205	-.0004	99.79	-.0001	-.0002	.0008
#3	-.0002	.0377	-.0007	.0203	-.0004	100.2	-.0001	-.0002	.0010

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0024**	**.2535**	**.2684**	**.7525**	**.0085**	**-.0008**	**4.538**	**.0000**	**.0001**
Stddev	.0000	.0013	.0399	.0233	.0001	.0001	.025	.0001	.0008
%RSD	1.138	.5059	14.88	3.099	.9391	10.51	.5500	1013.	1149.
#1	.0024	.2526	.2480	.7795	.0085	-.0009	4.521	.0000	.0002
#2	.0023	.2550	.2428	.7389	.0084	-.0007	4.525	.0001	.0008
#3	.0024	.2530	.3144	.7393	.0084	-.0007	4.566	-.0001	-.0008

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0008**	**.0027**	**.9149**	**-.0005**	**.8295**	**.0009**	**-.0024**	**.0007**	**.0287**
Stddev	.0003	.0011	.0014	.0001	.0040	.0000	.0004	.0001	.0002
%RSD	41.04	41.36	.1498	10.35	.4819	3.496	16.26	17.04	.7457
#1	-.0010	.0014	.9158	-.0005	.8253	.0009	-.0024	.0006	.0289
#2	-.0009	.0034	.9157	-.0005	.8299	.0009	-.0020	.0006	.0285
#3	-.0004	.0033	.9134	-.0006	.8333	.0009	-.0027	.0008	.0286

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2403.3**	**4567.3**	**37491.**	**3498.7**
Stddev	7.1	16.3	80.	5.8
%RSD	.29418	.35658	.21220	.16707
#1	2395.8	4550.9	37519.	3504.2
#2	2404.3	4567.6	37401.	3492.6
#3	2409.8	4583.5	37552.	3499.5

Zoom In Zoom Out

Sample Name: FA34064-5 Acquired: 5/20/2016 13:06:04 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0001**	**.1755**	**-.0010**	**.0088**	**-.0004**	**85.41**	**-.0002**	**-.0001**	**.0009**
Stddev	.0005	.0020	.0002	.0002	.0000	.28	.0001	.0000	.0001
%RSD	461.8	1.131	24.80	2.214	5.389	.3314	42.30	10.79	12.60
#1	.0002	.1771	-.0009	.0090	-.0004	85.63	-.0002	-.0001	.0010
#2	.0002	.1761	-.0008	.0089	-.0004	85.50	-.0002	-.0001	.0008
#3	-.0007	.1733	-.0012	.0086	-.0004	85.09	-.0001	-.0001	.0009

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0008**	**.2867**	**3.420**	**.7129**	**.0021**	**.0001**	**3.909**	**.0004**	**-.0002**
Stddev	.0001	.0031	.018	.0572	.0000	.0000	.014	.0001	.0002
%RSD	16.14	1.064	.5251	8.019	1.894	48.67	.3451	37.95	102.5
#1	.0008	.2867	3.427	.7053	.0021	.0000	3.915	.0005	-.0002
#2	.0010	.2897	3.433	.6600	.0021	.0001	3.919	.0004	-.0004
#3	.0007	.2836	3.400	.7735	.0021	.0001	3.894	.0002	.0000

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0010**	**.0006**	**.6657**	**.0000**	**.7434**	**.0042**	**-.0017**	**.0042**	**.0085**
Stddev	.0008	.0009	.0023	.0002	.0042	.0006	.0005	.0002	.0000
%RSD	76.03	137.4	.3475	833.1	.5702	13.10	31.89	4.258	.2146
#1	-.0010	.0014	.6683	-.0001	.7454	.0048	-.0022	.0042	.0086
#2	-.0002	-.0003	.6639	-.0001	.7463	.0042	-.0011	.0045	.0086
#3	-.0018	.0009	.6648	.0003	.7386	.0037	-.0018	.0041	.0085

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2439.3**	**4621.3**	**37532.**	**3532.8**
Stddev	13.6	20.5	238.	23.0
%RSD	.55793	.44405	.63356	.65065
#1	2424.3	4601.7	37308.	3532.4
#2	2442.7	4619.5	37508.	3510.0
#3	2450.8	4642.6	37781.	3556.0

Zoom In Zoom Out

Sample Name: FA34064-6 Acquired: 5/20/2016 13:10:34 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0002**	**.3270**	**-.0008**	**.0273**	**-.0004**	**127.8**	**.0003**	**.0012**	**.0036**
Stddev	.0002	.0121	.0009	.0003	.0000	.5	.0000	.0001	.0001
%RSD	75.21	3.710	112.4	.9913	9.125	.4160	4.093	8.962	1.607
#1	-.0003	.3250	-.0006	.0270	-.0005	127.2	.0002	.0012	.0037
#2	.0000	.3399	-.0018	.0276	-.0004	128.3	.0003	.0013	.0036
#3	-.0003	.3159	.0000	.0274	-.0004	127.8	.0003	.0011	.0036

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0769**	**6.082**	**8.956**	**2.471**	**.0624**	**-.0009**	**17.33**	**.0100**	**.0058**
Stddev	.0004	.037	.057	.024	.0006	.0002	.03	.0002	.0002
%RSD	.4900	.6123	.6403	.9725	.9093	16.59	.1925	1.598	3.884
#1	.0765	6.074	8.899	2.450	.0622	-.0008	17.29	.0099	.0055
#2	.0771	6.123	9.014	2.465	.0620	-.0009	17.35	.0102	.0059
#3	.0771	6.050	8.955	2.497	.0630	-.0011	17.35	.0099	.0059

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0010**	**.0028**	**3.009**	**.0001**	**.9581**	**.0086**	**-.0021**	**.0013**	**.0181**
Stddev	.0013	.0008	.031	.0003	.0042	.0002	.0006	.0002	.0001
%RSD	128.2	29.67	1.024	230.9	.4436	2.706	29.73	15.81	.5956
#1	-.0024	.0032	3.008	.0001	.9532	.0083	-.0024	.0015	.0180
#2	.0002	.0018	3.040	.0004	.9609	.0087	-.0024	.0011	.0182
#3	-.0008	.0033	2.978	-.0001	.9602	.0086	-.0014	.0012	.0181

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2338.2**	**4505.6**	**36520.**	**3528.0**
Stddev	17.9	35.8	315.	10.4
%RSD	.76354	.79450	.86368	.29442
#1	2342.1	4505.8	36526.	3538.6
#2	2318.7	4469.7	36832.	3517.8
#3	2353.7	4541.3	36201.	3527.7

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: FA34064-7 Acquired: 5/20/2016 13:15:02 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0001**	**.1401**	**-.0008**	**.0167**	**-.0003**	**110.6**	**-.0002**	**.0004**	**.0031**
Stddev	.0002	.0163	.0003	.0002	.0000	.8	.0000	.0001	.0003
%RSD	237.6	11.60	34.62	.9085	6.219	.7153	18.42	19.35	10.24
#1	.0001	.1583	-.0008	.0166	-.0003	111.3	-.0002	.0003	.0035
#2	.0000	.1268	-.0011	.0169	-.0003	110.7	-.0001	.0005	.0029
#3	-.0003	.1353	-.0005	.0166	-.0003	109.7	-.0002	.0003	.0030

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0123**	**5.233**	**8.477**	**1.426**	**.0052**	**-.0009**	**27.11**	**.0007**	**-.0001**
Stddev	.0001	.016	.047	.027	.0000	.0002	.09	.0002	.0001
%RSD	1.141	.3139	.5502	1.888	.5238	22.15	.3418	28.70	108.8
#1	.0122	5.246	8.519	1.449	.0052	-.0009	27.14	.0006	-.0001
#2	.0124	5.237	8.486	1.431	.0052	-.0011	27.19	.0009	-.0003
#3	.0125	5.214	8.427	1.396	.0052	-.0007	27.01	.0005	.0000

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0012**	**.0033**	**1.946**	**.0001**	**.9648**	**.0050**	**-.0024**	**.0022**	**.0088**
Stddev	.0008	.0009	.005	.0003	.0040	.0001	.0015	.0002	.0001
%RSD	69.68	28.18	.2516	253.3	.4185	2.242	61.39	7.712	.7775
#1	-.0018	.0031	1.952	.0004	.9651	.0050	-.0007	.0024	.0089
#2	-.0015	.0024	1.944	-.0002	.9687	.0049	-.0033	.0023	.0087
#3	-.0002	.0042	1.943	.0003	.9606	.0051	-.0033	.0020	.0088

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2329.7**	**4506.5**	**36762.**	**3469.9**
Stddev	6.6	12.5	183.	24.3
%RSD	.28307	.27758	.49777	.70024
#1	2323.9	4492.4	36630.	3453.0
#2	2328.4	4511.1	36685.	3459.0
#3	2336.9	4516.1	36971.	3497.7

Zoom In Zoom Out

Sample Name: FA34064-8 Acquired: 5/20/2016 13:19:33 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0001**	**.1623**	**-.0012**	**.0068**	**-.0004**	**133.2**	**.0007**	**-.0002**	**.0011**
Stddev	.0002	.0049	.0006	.0003	.0000	1.0	.0000	.0001	.0003
%RSD	237.6	3.048	51.87	4.572	8.745	.7318	6.098	28.51	23.66
#1	-.0001	.1578	-.0006	.0070	-.0004	132.1	.0007	-.0002	.0010
#2	.0001	.1676	-.0011	.0070	-.0005	133.4	.0008	-.0003	.0010
#3	-.0003	.1614	-.0018	.0065	-.0004	134.0	.0007	-.0002	.0014

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0172**	**.5244**	**6.313**	**1.499**	**.0010**	**.0040**	**18.38**	**.0004**	**.0025**
Stddev	.0005	.0034	.029	.024	.0000	.0000	.14	.0001	.0006
%RSD	2.681	.6467	.4603	1.621	3.462	.7401	.7575	29.94	21.94
#1	.0174	.5264	6.282	1.472	.0010	.0040	18.24	.0005	.0027
#2	.0167	.5204	6.317	1.503	.0010	.0040	18.38	.0003	.0030
#3	.0176	.5262	6.340	1.520	.0010	.0040	18.52	.0004	.0019

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0002**	**.0049**	**1.410**	**-.0004**	**1.050**	**.0047**	**-.0019**	**.0007**	**.0088**
Stddev	.0004	.0012	.002	.0004	.004	.0001	.0009	.0003	.0000
%RSD	219.3	23.74	.1213	99.39	.4294	2.296	48.31	47.02	.4345
#1	.0006	.0046	1.408	-.0004	1.046	.0048	-.0030	.0007	.0087
#2	-.0002	.0039	1.409	.0000	1.048	.0047	-.0015	.0003	.0088
#3	.0002	.0062	1.412	-.0008	1.055	.0045	-.0013	.0009	.0088

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2325.3**	**4461.6**	**36404.**	**3484.3**
Stddev	5.8	4.1	171.	29.0
%RSD	.25140	.09273	.46920	.83224
#1	2318.6	4456.9	36553.	3514.1
#2	2329.5	4463.3	36218.	3482.6
#3	2327.8	4464.7	36442.	3456.1

Zoom In Zoom Out

Sample Name: FA34083-1 Acquired: 5/20/2016 13:24:03 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0001**	**.0005**	**-.0016**	**.0064**	**-.0004**	**27.75**	**-.0001**	**-.0001**	**.0003**
Stddev	.0002	.0027	.0007	.0001	.0001	.11	.0000	.0001	.0001
%RSD	228.0	503.4	40.40	1.112	18.45	.3854	31.69	36.38	44.71
#1	.0000	.0023	-.0018	.0065	-.0004	27.67	-.0002	-.0002	.0004
#2	-.0001	.0018	-.0009	.0063	-.0003	27.87	-.0001	-.0001	.0002
#3	.0003	-.0025	-.0021	.0064	-.0004	27.71	-.0002	-.0001	.0003

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0004**	**.2217**	**.3934**	**1.690**	**.0019**	**-.0012**	**2.462**	**.0000**	**.0000**
Stddev	.0001	.0010	.0073	.013	.0000	.0001	.013	.0002	.0002
%RSD	13.65	.4622	1.858	.7430	.8464	11.73	.5164	1069.	3695.
#1	.0005	.2222	.3849	1.682	.0019	-.0014	2.448	.0000	.0000
#2	.0004	.2223	.3975	1.704	.0019	-.0012	2.473	.0002	.0002
#3	.0004	.2205	.3977	1.683	.0019	-.0011	2.466	-.0002	-.0002

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0003**	**.0020**	**.8321**	**-.0002**	**.0655**	**-.0004**	**-.0018**	**.0000**	**.0042**
Stddev	.0003	.0015	.0030	.0002	.0005	.0001	.0007	.0001	.0000
%RSD	87.03	74.51	.3608	122.3	.6882	16.14	36.45	737.2	.5849
#1	-.0004	.0037	.8291	-.0004	.0654	-.0003	-.0024	.0000	.0042
#2	-.0005	.0012	.8322	.0000	.0660	-.0004	-.0011	.0001	.0042
#3	.0000	.0011	.8351	-.0001	.0651	-.0004	-.0019	-.0001	.0042

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2530.2**	**4692.5**	**38573.**	**3595.6**
Stddev	2.3	10.4	154.	34.8
%RSD	.08976	.22264	.39857	.96923
#1	2532.8	4700.7	38413.	3622.2
#2	2528.8	4696.0	38719.	3556.2
#3	2528.9	4680.7	38587.	3608.4

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/20/2016 13:28:33 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2542**	**40.29**	**2.095**	**1.991**	**2.043**	**40.33**	**2.120**	**2.085**	**2.090**
Stddev	.0010	.05	.007	.003	.005	.11	.007	.004	.006
%RSD	.3959	.1235	.3419	.1467	.2714	.2755	.3460	.2166	.2799
#1	.2531	40.24	2.099	1.992	2.036	40.20	2.127	2.089	2.092
#2	.2543	40.34	2.099	1.994	2.047	40.38	2.121	2.086	2.095
#3	.2551	40.29	2.086	1.988	2.045	40.40	2.112	2.080	2.084
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.015**	**41.88**	**39.97**	**40.13**	**2.136**	**2.081**	**41.10**	**2.125**	**2.071**
Stddev	.007	.15	.16	.22	.006	.005	.10	.007	.004
%RSD	.3511	.3581	.3914	.5515	.2701	.2563	.2552	.3521	.2191
#1	2.010	41.72	39.82	39.89	2.142	2.085	41.00	2.132	2.075
#2	2.011	42.01	40.13	40.19	2.133	2.083	41.21	2.126	2.073
#3	2.023	41.91	39.96	40.32	2.132	2.075	41.10	2.117	2.066
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.081**	**2.083**	**2.158**	**2.098**	**2.005**	**2.129**	**2.090**	**2.115**	**2.080**
Stddev	.002	.003	.004	.002	.001	.002	.006	.005	.008
%RSD	.0937	.1628	.1900	.0819	.0640	.0883	.2847	.2184	.3804
#1	2.082	2.085	2.155	2.099	2.004	2.131	2.093	2.119	2.087
#2	2.079	2.079	2.163	2.096	2.006	2.128	2.093	2.116	2.081
#3	2.081	2.083	2.156	2.099	2.004	2.129	2.083	2.110	2.071
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/20/2016 13:28:33 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2207.1**	**4531.5**	**37038.**	**3520.2**
Stddev	5.7	9.0	105.	28.1
%RSD	.25816	.19968	.28445	.79763
#1	2206.5	4526.1	36917.	3548.3
#2	2201.8	4526.4	37111.	3492.1
#3	2213.1	4541.9	37085.	3520.4

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/20/2016 13:32:44 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**-.0057**	**-.0008**	**.0000**	**.0000**	**.0079**	**.0002**	**.0002**	**.0002**
Stddev	.0002	.0084	.0003	.0002	.000	.0034	.0000	.0001	.0003
%RSD	1200.	146.0	33.08	586.2	353.5	42.40	25.82	36.10	149.7
#1	.0001	.0010	-.0011	.0001	.0001	.0116	.0002	.0002	.0005
#2	-.0002	-.0031	-.0007	-.0001	.0000	.0071	.0002	.0002	.0001
#3	.0001	-.0152	-.0006	.0001	-.0001	.0051	.0001	.0001	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005**	**.0043**	**-.0089**	**-.0337**	**.0002**	**.0004**	**.0232**	**.0001**	**.0001**
Stddev	.0002	.0020	.0343	.0100	.0000	.0003	.0044	.0001	.0002
%RSD	33.79	46.13	387.2	29.83	17.23	95.43	18.93	85.30	123.2
#1	.0003	.0058	.0241	-.0421	.0002	.0007	.0264	.0001	.0003
#2	.0005	.0020	-.0444	-.0363	.0002	.0003	.0182	.0003	.0000
#3	.0006	.0052	-.0063	-.0226	.0002	.0001	.0250	.0001	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0002**	**.0001**	**.0026**	**.0003**	**.0000**	**.0004**	**-.0006**	**.0002**	**.0004**
Stddev	.0003	.0005	.0001	.0002	.0001	.0001	.0007	.0000	.0000
%RSD	147.3	335.9	5.717	61.08	281.5	21.10	126.6	24.51	7.704
#1	-.0002	.0007	.0027	.0002	.0001	.0005	.0002	.0002	.0004
#2	-.0006	-.0002	.0026	.0004	.0001	.0004	-.0006	.0002	.0004
#3	.0001	-.0001	.0024	.0001	-.0001	.0004	-.0012	.0001	.0004
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/20/2016 13:32:44 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2569.3**	**4726.0**	**38717.**	**3511.6**
Stddev	1.8	8.7	58.	12.8
%RSD	.06867	.18371	.15037	.36544
#1	2567.8	4718.1	38722.	3500.7
#2	2571.2	4735.3	38773.	3525.7
#3	2568.9	4724.7	38657.	3508.4

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/20/2016 14:04:31 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2500**	**40.32**	**1.981**	**2.003**	**2.009**	**40.60**	**2.012**	**2.006**	**2.025**
Stddev	.0014	.14	.005	.008	.007	.13	.001	.002	.010
%RSD	.5794	.3532	.2649	.4051	.3378	.3171	.0629	.1171	.4775
#1	.2500	40.25	1.986	2.006	2.011	40.55	2.011	2.008	2.018
#2	.2515	40.49	1.976	2.009	2.014	40.75	2.013	2.004	2.036
#3	.2486	40.23	1.982	1.994	2.001	40.51	2.012	2.005	2.021
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.012**	**41.63**	**40.38**	**40.54**	**2.051**	**2.007**	**40.12**	**2.005**	**1.969**
Stddev	.008	.13	.19	.03	.011	.002	.13	.001	.002
%RSD	.4063	.3057	.4613	.0689	.5116	.0957	.3239	.0476	.1136
#1	2.021	41.68	40.44	40.56	2.044	2.007	40.16	2.006	1.967
#2	2.006	41.73	40.53	40.51	2.063	2.006	40.23	2.005	1.969
#3	2.008	41.49	40.17	40.54	2.045	2.009	39.98	2.004	1.972
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.977**	**1.984**	**2.055**	**2.027**	**2.028**	**2.039**	**1.988**	**2.014**	**2.021**
Stddev	.003	.004	.004	.001	.007	.007	.009	.006	.005
%RSD	.1426	.2263	.2011	.0564	.3680	.3267	.4559	.3075	.2437
#1	1.980	1.987	2.060	2.027	2.026	2.037	1.994	2.009	2.016
#2	1.974	1.979	2.052	2.027	2.036	2.047	1.992	2.021	2.022
#3	1.977	1.986	2.054	2.029	2.021	2.034	1.977	2.011	2.025
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/20/2016 14:04:31 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2253.6**	**4675.2**	**37561.**	**3499.8**
Stddev	.9	6.0	110.	25.4
%RSD	.03937	.12748	.29200	.72495
#1	2254.4	4671.4	37518.	3521.0
#2	2253.6	4682.0	37480.	3471.7
#3	2252.7	4672.1	37686.	3506.8

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/20/2016 14:16:31 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0002**	**.0040**	**-.0001**	**.0003**	**.0000**	**.0059**	**.0001**	**.0001**	**.0001**
Stddev	.0002	.0009	.0004	.0001	.0000	.0007	.0000	.0001	.0001
%RSD	78.61	22.77	410.2	43.49	48.77	11.82	60.15	120.6	109.3
#1	-.0002	.0044	-.0003	.0004	.0000	.0064	.0001	.0001	.0002
#2	-.0004	.0030	-.0004	.0002	.0000	.0061	.0000	.0001	.0000
#3	-.0001	.0047	.0004	.0003	.0000	.0051	.0001	.0000	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0002**	**.0038**	**-.0194**	**.0151**	**.0001**	**.0004**	**-.0069**	**.0001**	**.0008**
Stddev	.0001	.0005	.0133	.0071	.0000	.0000	.0142	.0002	.0003
%RSD	55.90	13.70	68.49	46.66	25.77	9.938	205.2	112.8	31.63
#1	-.0003	.0040	-.0066	.0233	.0001	.0004	.0048	.0001	.0005
#2	-.0002	.0042	-.0330	.0108	.0001	.0003	-.0029	.0000	.0009
#3	-.0001	.0032	-.0185	.0113	.0001	.0004	-.0226	.0003	.0010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.0021**	**.0013**	**.0008**	**.0002**	**.0001**	**.0003**	**-.0003**	**.0001**	**.0003**
Stddev	.0006	.0005	.0009	.0002	.0001	.0001	.0007	.0003	.0001
%RSD	30.32	40.84	105.7	102.5	51.36	33.94	255.6	454.3	30.65
#1	.0017	.0012	.0018	.0004	.0001	.0003	-.0010	-.0002	.0003
#2	.0028	.0009	.0002	.0003	.0000	.0002	.0002	.0003	.0003
#3	.0017	.0019	.0005	.0000	.0002	.0004	.0000	.0001	.0002
Check ?	Chk Fail	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.0020								
Low Limit	-.0020								

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/20/2016 14:16:31 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2584.6**	**4791.7**	**38622.**	**3474.4**
Stddev	3.4	2.8	72.	14.8
%RSD	.13109	.05923	.18623	.42575
#1	2587.5	4794.9	38605.	3483.0
#2	2580.9	4790.1	38701.	3482.9
#3	2585.3	4789.9	38560.	3457.3

Zoom In Zoom Out

Sample Name: FA34083-2 Acquired: 5/20/2016 14:21:17 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0004**	**.0388**	**.0008**	**.0106**	**.0000**	**3.620**	**.0000**	**.0001**	**.0005**
Stddev	.0001	.0052	.0003	.0003	.000	.021	.000	.0000	.0002
%RSD	39.91	13.46	38.26	2.881	191.8	.5746	494.5	17.11	39.09
#1	-.0002	.0334	.0005	.0108	-.0001	3.633	-.0001	.0001	.0003
#2	-.0005	.0439	.0010	.0102	.0000	3.631	.0000	.0001	.0007
#3	-.0003	.0392	.0010	.0107	.0000	3.596	.0000	.0001	.0005

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0001**	**2.369**	**2.708**	**2.261**	**.0041**	**.0003**	**15.99**	**.0000**	**.0003**
Stddev	.0003	.012	.048	.020	.0000	.0001	.09	.0002	.0008
%RSD	246.0	.5215	1.780	.8788	.9198	38.32	.5879	501.3	303.0
#1	.0003	2.381	2.760	2.265	.0040	.0004	16.03	-.0002	-.0005
#2	.0003	2.368	2.700	2.239	.0041	.0003	16.05	.0002	.0010
#3	-.0002	2.356	2.665	2.278	.0041	.0002	15.88	.0001	.0003

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0022**	**.0022**	**1.467**	**.0001**	**.0035**	**.0005**	**-.0001**	**.0006**	**.0004**
Stddev	.0001	.0011	.007	.0002	.0001	.0001	.0005	.0001	.0000
%RSD	2.817	49.22	.5086	167.5	2.509	11.70	414.1	14.47	8.147
#1	.0022	.0020	1.475	.0002	.0034	.0004	-.0004	.0005	.0005
#2	.0021	.0033	1.463	-.0001	.0036	.0004	-.0003	.0006	.0004
#3	.0021	.0012	1.462	.0002	.0035	.0005	.0004	.0007	.0004

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2540.4**	**4848.2**	**39168.**	**3541.7**
Stddev	8.8	18.7	194.	44.3
%RSD	.34510	.38489	.49567	1.2499
#1	2540.3	4830.3	39134.	3504.6
#2	2531.7	4846.8	38993.	3529.7
#3	2549.2	4867.5	39377.	3590.7

Zoom In Zoom Out

Sample Name: FA34083-3 Acquired: 5/20/2016 14:25:49 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0004**	**.3415**	**.0004**	**.0422**	**.0000**	**98.67**	**.0001**	**-.0003**	**.0013**
Stddev	.0001	.0035	.0003	.0003	.0000	.84	.0001	.0001	.0003
%RSD	22.26	1.039	70.14	.6533	246.3	.8524	73.63	25.87	20.68
#1	-.0005	.3440	.0007	.0420	.0000	98.28	.0001	-.0002	.0012
#2	-.0003	.3431	.0005	.0425	.0000	99.63	.0000	-.0003	.0016
#3	-.0005	.3375	.0001	.0421	.0000	98.09	.0002	-.0003	.0011

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0016**	**41.14**	**1.181**	**5.325**	**.1401**	**.0004**	F **98.73**	**-.0009**	**-.0026**
Stddev	.0001	.24	.029	.068	.0002	.0001	.32	.0003	.0002
%RSD	5.453	.5953	2.427	1.268	.1231	16.31	.3261	33.56	8.610
#1	.0016	41.12	1.170	5.279	.1402	.0004	98.71	-.0013	-.0029
#2	.0017	41.40	1.159	5.402	.1402	.0005	99.07	-.0008	-.0026
#3	.0015	40.91	1.214	5.293	.1399	.0003	98.43	-.0007	-.0024

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0021**	**.0126**	**6.676**	**.0015**	**.3410**	**.0049**	**-.0021**	**.0029**	**.0012**
Stddev	.0008	.0004	.023	.0004	.0017	.0000	.0006	.0001	.0000
%RSD	38.99	2.890	.3391	24.28	.5076	.7171	27.22	2.087	3.384
#1	.0029	.0129	6.702	.0012	.3393	.0049	-.0015	.0029	.0011
#2	.0019	.0122	6.659	.0014	.3427	.0050	-.0022	.0029	.0012
#3	.0014	.0126	6.666	.0019	.3410	.0049	-.0027	.0030	.0012

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2272.1**	**4627.7**	**37231.**	**3476.0**
Stddev	11.4	10.2	84.	37.4
%RSD	.49978	.22002	.22534	1.0746
#1	2260.5	4616.2	37135.	3490.0
#2	2272.5	4631.4	37286.	3433.6
#3	2283.2	4635.5	37272.	3504.3

Zoom In Zoom Out

Sample Name: FA34088-1 Acquired: 5/20/2016 14:30:17 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0001**	**.0157**	**.0002**	**.0390**	**-.0001**	**100.3**	**.0000**	**-.0002**	**.0010**
Stddev	.0002	.0109	.0002	.0003	.0000	.3	.000	.0000	.0001
%RSD	118.3	69.43	105.0	.8796	44.55	.2606	26.53	9.187	6.627
#1	-.0001	.0053	.0005	.0391	-.0001	100.1	.0000	-.0002	.0011
#2	.0000	.0270	.0000	.0386	-.0001	100.6	.0000	-.0003	.0009
#3	-.0003	.0146	.0001	.0392	-.0001	100.2	.0000	-.0002	.0010

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0004**	**.0202**	**2.769**	**44.87**	**.0003**	**.0008**	**7.625**	**-.0003**	**-.0001**
Stddev	.0002	.0031	.035	.06	.0000	.0001	.032	.0001	.0002
%RSD	40.91	15.34	1.264	.1424	12.13	13.05	.4248	28.54	330.3
#1	.0004	.0186	2.731	44.94	.0002	.0010	7.588	-.0004	-.0001
#2	.0003	.0238	2.776	44.86	.0003	.0008	7.644	-.0002	.0002
#3	.0006	.0183	2.800	44.81	.0003	.0007	7.644	-.0004	-.0003

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0020**	**.0041**	**7.976**	**.0004**	**.3560**	**.0010**	**-.0001**	**.0020**	**.0070**
Stddev	.0004	.0013	.087	.0003	.0026	.0000	.0013	.0000	.0002
%RSD	19.29	31.15	1.086	87.35	.7186	3.250	973.8	2.050	2.716
#1	.0020	.0053	8.076	.0000	.3536	.0010	-.0006	.0019	.0072
#2	.0023	.0042	7.935	.0007	.3587	.0010	-.0011	.0020	.0069
#3	.0016	.0028	7.918	.0005	.3557	.0010	.0013	.0019	.0069

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2345.7**	**4619.4**	**36668.**	**3368.3**
Stddev	21.4	41.0	148.	11.2
%RSD	.91376	.88843	.40251	.33369
#1	2321.0	4572.6	36814.	3375.7
#2	2357.1	4636.1	36670.	3355.3
#3	2359.0	4649.4	36519.	3373.7

Zoom In Zoom Out

Sample Name: FA34088-2 Acquired: 5/20/2016 14:34:47 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0000**	**.1962**	**.0008**	**.0394**	**-.0001**	**96.44**	**.0000**	**-.0001**	**.0010**
Stddev	.000	.0070	.0006	.0002	.0000	.28	.000	.0001	.0002
%RSD	5659.	3.543	81.26	.4383	15.51	.2919	8.029	45.22	17.74
#1	.0000	.2042	.0013	.0395	-.0001	96.30	.0000	-.0001	.0008
#2	.0000	.1923	.0010	.0394	-.0001	96.76	.0000	-.0001	.0010
#3	-.0001	.1921	.0001	.0392	-.0001	96.25	.0000	-.0002	.0011

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0005**	**.2209**	**2.683**	**43.20**	**.0046**	**.0009**	**6.950**	**-.0001**	**.0002**
Stddev	.0002	.0061	.011	.25	.0000	.0001	.016	.0002	.0002
%RSD	39.79	2.766	.4252	.5823	1.060	11.60	.2247	205.7	105.3
#1	.0005	.2271	2.687	43.04	.0046	.0010	6.968	.0001	.0001
#2	.0003	.2149	2.693	43.49	.0047	.0008	6.941	-.0001	.0004
#3	.0007	.2207	2.671	43.07	.0046	.0010	6.941	-.0003	.0001

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0009**	**.0025**	**7.922**	**.0002**	**.3451**	**.0074**	**.0003**	**.0018**	**.0071**
Stddev	.0005	.0014	.026	.0002	.0015	.0000	.0007	.0001	.0000
%RSD	53.58	55.87	.3348	109.8	.4325	.4710	208.5	6.105	.6644
#1	.0005	.0018	7.910	.0001	.3443	.0074	.0002	.0018	.0071
#2	.0008	.0017	7.953	.0005	.3468	.0074	.0011	.0017	.0071
#3	.0014	.0042	7.904	.0001	.3441	.0074	-.0003	.0020	.0071

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2386.5**	**4705.2**	**37753.**	**3497.0**
Stddev	2.3	16.6	298.	24.0
%RSD	.09613	.35247	.78911	.68533
#1	2384.5	4712.6	37506.	3524.6
#2	2386.0	4686.2	37670.	3480.9
#3	2389.0	4716.8	38084.	3485.6

Zoom In Zoom Out

Sample Name: FA34088-3 Acquired: 5/20/2016 14:39:15 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0002**	**.1078**	**-.0008**	**.0483**	**-.0001**	**107.2**	**.0000**	**-.0003**	**.0007**
Stddev	.0001	.0051	.0010	.0003	.0001	.4	.0000	.0001	.0001
%RSD	59.46	4.713	120.5	.5792	59.91	.3456	1036.	26.11	16.04
#1	-.0003	.1060	-.0018	.0482	-.0001	107.0	.0000	-.0002	.0007
#2	-.0001	.1136	.0001	.0486	-.0001	107.6	.0000	-.0003	.0006
#3	-.0001	.1039	-.0007	.0481	-.0002	106.9	.0000	-.0004	.0009

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0001**	**.0693**	**3.126**	**52.41**	**.0019**	**.0007**	**5.861**	**-.0004**	**.0002**
Stddev	.0001	.0031	.023	.11	.0000	.0001	.022	.0001	.0005
%RSD	93.09	4.470	.7290	.2150	1.288	19.69	.3710	34.21	246.6
#1	.0000	.0701	3.151	52.31	.0019	.0008	5.880	-.0005	.0002
#2	.0001	.0658	3.121	52.54	.0019	.0005	5.865	-.0003	.0007
#3	.0002	.0719	3.107	52.39	.0019	.0006	5.837	-.0003	-.0003

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0010**	**.0032**	**8.388**	**.0001**	**.3794**	**.0044**	**-.0003**	**.0020**	**.0080**
Stddev	.0004	.0004	.020	.0003	.0018	.0003	.0011	.0001	.0000
%RSD	37.93	12.15	.2437	225.8	.4767	7.379	413.3	5.713	.4473
#1	.0012	.0037	8.410	.0003	.3800	.0044	-.0015	.0020	.0080
#2	.0006	.0030	8.384	-.0002	.3809	.0048	.0005	.0021	.0080
#3	.0013	.0030	8.370	.0003	.3774	.0041	.0002	.0019	.0081

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2359.9**	**4665.3**	**37493.**	**3481.7**
Stddev	3.3	11.0	69.	14.2
%RSD	.13907	.23650	.18431	.40873
#1	2356.2	4652.6	37447.	3496.1
#2	2360.8	4671.1	37459.	3467.7
#3	2362.6	4672.2	37572.	3481.4

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: FA34088-4 Acquired: 5/20/2016 14:43:46 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0001**	**1.817**	**-.0006**	**.0462**	**.0000**	**89.31**	**.0000**	**.0004**	**.0028**
Stddev	.0002	.041	.0008	.0006	.000	.58	.0000	.0000	.0001
%RSD	226.8	2.257	135.7	1.213	102.3	.6542	284.1	11.08	3.462
#1	-.0002	1.770	-.0014	.0459	.0000	88.91	.0000	.0004	.0029
#2	.0001	1.834	-.0005	.0458	-.0001	89.05	.0000	.0004	.0027
#3	-.0001	1.846	.0002	.0468	.0000	89.98	.0000	.0005	.0029

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0019**	**1.413**	**4.348**	**48.81**	**.0340**	**.0013**	**7.700**	**.0011**	**-.0001**
Stddev	.0001	.014	.032	.32	.0001	.0001	.051	.0001	.0002
%RSD	6.440	1.020	.7373	.6615	.1697	11.48	.6643	9.280	108.6
#1	.0017	1.400	4.311	48.55	.0341	.0014	7.647	.0010	-.0002
#2	.0019	1.411	4.371	48.70	.0340	.0014	7.703	.0012	-.0002
#3	.0020	1.428	4.361	49.17	.0340	.0011	7.749	.0010	.0000

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0015**	**.0032**	**12.06**	**-.0001**	**.3112**	**.0583**	**-.0008**	**.0049**	**.0123**
Stddev	.0006	.0014	.07	.0002	.0019	.0020	.0005	.0003	.0001
%RSD	38.00	44.61	.5786	164.2	.6014	3.483	65.17	6.168	.4527
#1	.0022	.0021	12.13	.0000	.3099	.0578	-.0005	.0049	.0124
#2	.0011	.0026	12.07	.0000	.3104	.0566	-.0014	.0052	.0123
#3	.0013	.0048	11.99	-.0004	.3134	.0606	-.0005	.0046	.0123

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2346.6**	**4672.4**	**37563.**	**3411.4**
Stddev	10.7	19.3	44.	17.5
%RSD	.45705	.41213	.11617	.51275
#1	2334.5	4652.8	37535.	3424.0
#2	2350.3	4673.3	37540.	3418.6
#3	2355.0	4691.2	37613.	3391.4

Zoom In Zoom Out

Sample Name: FA34088-5 Acquired: 5/20/2016 14:48:13 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0004**	**.1733**	**.0014**	**.1008**	**-.0001**	**246.6**	**-.0001**	**-.0002**	**.0019**
Stddev	.0002	.0052	.0007	.0005	.0000	4.2	.0000	.0000	.0002
%RSD	44.86	2.996	55.32	.5117	35.46	1.694	12.13	21.71	9.987
#1	-.0005	.1783	.0021	.1003	-.0001	242.6	-.0001	-.0002	.0021
#2	-.0003	.1679	.0014	.1007	.0000	246.4	.0000	-.0002	.0017
#3	-.0002	.1738	.0006	.1013	-.0001	250.9	-.0001	-.0001	.0019

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0002**	**.0941**	**9.348**	**112.1**	**.1275**	**.0007**	**54.17**	**.0005**	**-.0007**
Stddev	.0002	.0021	.028	1.2	.0002	.0002	.35	.0003	.0007
%RSD	90.67	2.220	.2976	1.070	.1785	21.48	.6448	68.76	110.1
#1	.0002	.0939	9.333	111.2	.1277	.0009	53.89	.0003	-.0009
#2	.0000	.0921	9.331	111.7	.1275	.0006	54.06	.0008	-.0012
#3	.0004	.0963	9.380	113.4	.1272	.0007	54.56	.0002	.0002

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0011**	**.0093**	**11.89**	**.0001**	**.7191**	**.0054**	**.0003**	**.0032**	**.0268**
Stddev	.0010	.0021	.02	.0003	.0045	.0003	.0002	.0002	.0001
%RSD	90.66	22.69	.1410	266.7	.6240	5.998	50.76	5.986	.4481
#1	.0022	.0105	11.90	.0005	.7154	.0051	.0004	.0030	.0269
#2	.0001	.0105	11.89	-.0001	.7179	.0058	.0001	.0031	.0268
#3	.0011	.0068	11.87	.0000	.7241	.0054	.0003	.0034	.0267

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2166.5**	**4389.3**	**35357.**	**3379.1**
Stddev	1.5	7.8	139.	30.8
%RSD	.06981	.17687	.39179	.91076
#1	2168.0	4383.0	35197.	3408.6
#2	2166.4	4387.1	35436.	3381.5
#3	2165.0	4398.0	35438.	3347.2

Zoom In Zoom Out

Sample Name: FA34089-1 Acquired: 5/20/2016 14:52:48 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0001**	**.0465**	**.0005**	**.0685**	**-.0001**	**127.2**	**.0000**	**-.0003**	**.0005**
Stddev	.0003	.0012	.0005	.0002	.0001	1.2	.000	.0001	.0001
%RSD	251.9	2.498	99.28	.3451	82.96	.9043	189.3	19.69	14.77
#1	.0002	.0452	.0005	.0688	-.0001	128.5	-.0001	-.0004	.0004
#2	-.0004	.0474	.0000	.0685	.0000	127.0	.0000	-.0003	.0005
#3	-.0002	.0469	.0010	.0683	-.0001	126.2	.0000	-.0003	.0005

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0010**	**.0207**	**2.358**	**44.49**	**.0012**	**.0008**	**4.672**	**.0005**	**-.0002**
Stddev	.0001	.0016	.029	.44	.0000	.0000	.004	.0000	.0005
%RSD	11.67	7.606	1.237	.9834	3.563	2.850	.0951	3.942	224.2
#1	.0009	.0212	2.324	44.94	.0012	.0009	4.676	.0005	-.0003
#2	.0010	.0220	2.379	44.48	.0012	.0008	4.671	.0005	.0003
#3	.0011	.0190	2.370	44.06	.0013	.0008	4.668	.0005	-.0007

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0014**	**.0052**	**6.040**	**.0002**	**.3967**	**.0015**	**-.0007**	**.0018**	**.0089**
Stddev	.0008	.0012	.012	.0003	.0024	.0001	.0008	.0001	.0001
%RSD	57.92	22.42	.2047	180.0	.6085	9.838	121.6	6.291	.6688
#1	.0006	.0066	6.050	-.0002	.3993	.0015	-.0013	.0017	.0090
#2	.0023	.0047	6.043	.0004	.3963	.0013	.0002	.0018	.0089
#3	.0015	.0044	6.026	.0003	.3946	.0016	-.0008	.0019	.0089

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2326.3**	**4595.8**	**37146.**	**3428.4**
Stddev	5.2	10.8	158.	37.8
%RSD	.22267	.23416	.42636	1.1023
#1	2321.5	4584.6	37150.	3385.0
#2	2325.7	4596.8	36985.	3446.0
#3	2331.8	4606.0	37302.	3454.2

Zoom In Zoom Out

Sample Name: FA34089-2 Acquired: 5/20/2016 14:57:20 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0002**	**.0398**	**.0008**	**.0694**	**-.0001**	**129.2**	**.0000**	**-.0002**	**.0004**
Stddev	.0002	.0063	.0005	.0005	.0000	.8	.000	.0000	.0002
%RSD	88.42	15.75	63.97	.6824	85.27	.6260	97.98	6.392	69.05
#1	-.0002	.0462	.0009	.0689	.0000	128.8	-.0001	-.0002	.0006
#2	.0000	.0396	.0002	.0698	.0000	130.2	.0000	-.0002	.0001
#3	-.0004	.0337	.0012	.0697	-.0001	128.7	.0000	-.0002	.0004

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0007**	**.0172**	**2.407**	**45.20**	**.0012**	**.0010**	**4.746**	**.0007**	**-.0001**
Stddev	.0001	.0018	.021	.24	.0001	.0001	.022	.0001	.0011
%RSD	15.96	10.37	.8502	.5350	5.085	5.610	.4588	16.73	1454.
#1	.0008	.0169	2.419	45.06	.0013	.0009	4.730	.0008	.0007
#2	.0007	.0191	2.419	45.48	.0012	.0009	4.771	.0008	.0003
#3	.0006	.0156	2.383	45.07	.0012	.0010	4.736	.0006	-.0013

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0011**	**.0046**	**6.074**	**.0004**	**.4034**	**.0015**	**.0000**	**.0019**	**.0086**
Stddev	.0005	.0028	.016	.0003	.0023	.0000	.0007	.0002	.0001
%RSD	43.67	61.54	.2643	73.65	.5580	3.223	1911.	12.69	.9854
#1	.0016	.0078	6.092	.0005	.4008	.0014	-.0008	.0022	.0087
#2	.0012	.0035	6.061	.0006	.4048	.0015	.0004	.0018	.0086
#3	.0006	.0025	6.069	.0001	.4046	.0015	.0005	.0018	.0086

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2325.9**	**4599.4**	**36899.**	**3404.1**
Stddev	4.5	12.7	96.	24.1
%RSD	.19515	.27593	.25888	.70686
#1	2320.8	4585.6	36790.	3421.2
#2	2329.5	4610.6	36936.	3376.6
#3	2327.5	4602.0	36970.	3414.4

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: FA34089-3 Acquired: 5/20/2016 15:01:51 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0001**	**.0301**	**-.0002**	**.1303**	**-.0001**	**304.7**	**.0000**	**-.0001**	**.0001**
Stddev	.0001	.0068	.0008	.0002	.0000	2.4	.0000	.0001	.0001
%RSD	101.3	22.53	466.8	.1517	46.87	.7903	29.63	116.9	149.8
#1	-.0001	.0294	.0005	.1305	-.0001	305.1	.0000	-.0001	.0000
#2	-.0003	.0237	-.0011	.1302	-.0001	302.2	.0000	.0000	.0002
#3	.0000	.0372	.0001	.1302	-.0001	306.9	.0001	-.0002	.0000

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0004**	**.0115**	**4.556**	**112.7**	**.0644**	**.0007**	**38.83**	**.0028**	**.0005**
Stddev	.0001	.0030	.038	.1	.0004	.0001	.10	.0002	.0011
%RSD	37.81	26.15	.8267	.1188	.5473	11.16	.2450	6.533	237.9
#1	.0005	.0129	4.594	112.9	.0646	.0008	38.92	.0026	.0006
#2	.0002	.0080	4.553	112.7	.0640	.0007	38.85	.0028	.0015
#3	.0004	.0135	4.519	112.6	.0646	.0006	38.73	.0030	-.0007

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0009**	**.0106**	**12.04**	**.0004**	**1.075**	**.0007**	**-.0005**	**.0023**	**.0078**
Stddev	.0018	.0013	.06	.0005	.004	.0000	.0014	.0001	.0000
%RSD	200.8	11.85	.5263	117.7	.3866	4.309	278.7	5.774	.5267
#1	.0017	.0120	12.12	.0001	1.078	.0007	.0005	.0023	.0078
#2	.0022	.0101	12.01	.0010	1.077	.0007	.0001	.0022	.0079
#3	-.0012	.0096	12.00	.0002	1.071	.0007	-.0021	.0024	.0078

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2139.5**	**4357.4**	**34930.**	**3331.5**
Stddev	8.2	15.3	194.	12.9
%RSD	.38494	.35143	.55523	.38795
#1	2132.6	4340.9	34813.	3321.1
#2	2137.2	4360.0	35154.	3346.0
#3	2148.6	4371.2	34823.	3327.3

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/20/2016 15:06:26 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2522**	**41.52**	**1.961**	**2.061**	**2.035**	**42.09**	**1.991**	**2.008**	**2.032**
Stddev	.0002	.12	.008	.004	.010	.11	.008	.004	.002
%RSD	.0981	.2782	.4185	.2156	.4741	.2636	.4184	.2098	.0781
#1	.2523	41.51	1.967	2.056	2.033	42.05	1.990	2.009	2.030
#2	.2525	41.42	1.966	2.065	2.026	42.01	2.000	2.011	2.032
#3	.2520	41.65	1.952	2.061	2.046	42.22	1.984	2.003	2.033
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.049**	**42.47**	**41.85**	**42.07**	**2.035**	**2.011**	**40.45**	**1.976**	**1.964**
Stddev	.002	.20	.09	.23	.003	.006	.07	.007	.011
%RSD	.1161	.4667	.2136	.5354	.1358	.2936	.1787	.3473	.5506
#1	2.048	42.44	41.74	42.01	2.032	2.013	40.44	1.976	1.965
#2	2.052	42.29	41.89	41.87	2.038	2.015	40.39	1.983	1.974
#3	2.048	42.68	41.91	42.31	2.036	2.004	40.53	1.969	1.953
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.965**	**1.980**	**2.043**	**2.041**	**2.106**	**2.024**	**1.977**	**1.998**	**2.033**
Stddev	.004	.005	.008	.005	.005	.002	.008	.002	.007
%RSD	.1917	.2384	.3726	.2268	.2303	.1054	.4012	.1087	.3509
#1	1.966	1.984	2.049	2.045	2.102	2.021	1.978	1.996	2.033
#2	1.968	1.982	2.046	2.044	2.104	2.025	1.983	1.997	2.040
#3	1.960	1.975	2.034	2.036	2.111	2.024	1.968	2.000	2.026
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/20/2016 15:06:26 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2241.3**	**4692.1**	**37398.**	**3409.6**
Stddev	5.7	9.3	51.	19.4
%RSD	.25536	.19889	.13690	.56841
#1	2236.8	4681.8	37362.	3413.3
#2	2239.5	4694.5	37457.	3426.8
#3	2247.8	4699.9	37376.	3388.6

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/20/2016 15:10:38 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0002**	**.0035**	**.0008**	**.0005**	**.0000**	**.0056**	**.0001**	**.0002**	**.0002**
Stddev	.0003	.0024	.0006	.0002	.0000	.0017	.0000	.0001	.0001
%RSD	160.8	70.37	72.18	30.75	134.8	31.10	31.59	57.86	56.22
#1	-.0003	.0054	.0002	.0004	.0001	.0066	.0002	.0002	.0002
#2	-.0004	.0043	.0009	.0004	.0000	.0036	.0001	.0002	.0003
#3	.0001	.0007	.0013	.0007	.0000	.0065	.0001	.0001	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0002**	**.0124**	**.0068**	**.0130**	**.0002**	F **.0015**	**.0143**	**.0001**	**.0008**
Stddev	.0002	.0026	.0409	.0210	.0000	.0005	.0051	.0001	.0005
%RSD	122.3	21.13	605.0	161.2	17.08	30.68	35.31	85.60	68.49
#1	.0000	.0150	.0071	.0373	.0002	.0020	.0144	.0000	.0005
#2	-.0001	.0123	-.0343	-.0002	.0002	.0012	.0194	.0002	.0014
#3	-.0004	.0098	.0475	.0020	.0002	.0013	.0092	.0001	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.0024**	**.0019**	**.0005**	**-.0001**	**.0002**	**.0012**	**.0006**	**.0002**	**.0002**
Stddev	.0009	.0006	.0002	.0002	.0001	.0001	.0002	.0000	.0001
%RSD	38.80	32.98	32.58	226.4	61.11	10.07	28.93	20.60	34.60
#1	.0016	.0026	.0003	.0001	.0001	.0014	.0006	.0002	.0003
#2	.0034	.0017	.0007	-.0003	.0001	.0012	.0005	.0002	.0002
#3	.0021	.0015	.0005	.0000	.0003	.0011	.0008	.0003	.0001
Check ?	Chk Fail	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.0020								
Low Limit	-.0020								

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/20/2016 15:10:38 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2652.1**	**4975.5**	**39975.**	**3551.6**
Stddev	3.7	15.3	118.	19.1
%RSD	.13767	.30787	.29435	.53799
#1	2647.9	4976.0	40065.	3571.4
#2	2654.5	4990.6	40018.	3533.2
#3	2654.0	4960.0	39842.	3550.2

Zoom In Zoom Out

Sample Name: FA34089-4 Acquired: 5/20/2016 15:15:11 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0003**	**.0128**	**.0025**	**.0615**	**-.0001**	**80.47**	**-.0001**	**-.0002**	**.0003**
Stddev	.0003	.0023	.0003	.0007	.0000	.92	.0000	.0000	.0001
%RSD	102.0	18.11	14.09	1.062	40.68	1.138	38.36	24.87	31.11
#1	-.0005	.0153	.0025	.0621	.0000	81.17	-.0001	-.0002	.0005
#2	.0000	.0124	.0027	.0608	-.0001	79.43	-.0001	-.0001	.0002
#3	-.0002	.0108	.0021	.0617	-.0001	80.80	-.0001	-.0002	.0003

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**-.0004**	**.0185**	**5.132**	**36.46**	**.2120**	**.0021**	**8.232**	**-.0003**	**.0003**
Stddev	.0002	.0017	.027	.43	.0016	.0001	.062	.0001	.0001
%RSD	60.26	9.096	.5231	1.176	.7773	4.918	.7517	25.31	25.36
#1	-.0007	.0204	5.126	36.78	.2103	.0021	8.276	-.0002	.0003
#2	-.0003	.0172	5.108	35.98	.2136	.0019	8.161	-.0004	.0004
#3	-.0002	.0178	5.161	36.64	.2123	.0021	8.258	-.0003	.0003

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0012**	**.0029**	**10.73**	**.0004**	**.3373**	**.0011**	**-.0006**	**.0010**	**.0070**
Stddev	.0006	.0008	.10	.0002	.0029	.0001	.0009	.0003	.0000
%RSD	46.70	28.18	.9291	53.60	.8703	5.302	161.9	30.16	.4411
#1	.0015	.0026	10.81	.0004	.3385	.0012	-.0002	.0012	.0071
#2	.0015	.0038	10.75	.0002	.3339	.0011	.0001	.0006	.0070
#3	.0006	.0022	10.62	.0005	.3394	.0011	-.0016	.0011	.0070

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2379.0**	**4687.3**	**37587.**	**3401.5**
Stddev	24.4	41.7	251.	28.9
%RSD	1.0250	.89031	.66876	.85089
#1	2354.1	4653.4	37778.	3375.7
#2	2380.1	4674.6	37302.	3432.8
#3	2402.9	4733.9	37681.	3396.0

Zoom In Zoom Out

Sample Name: MP30376-MB1 Acquired: 5/20/2016 15:19:42 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0004**	**-.0025**	**-.0006**	**.0003**	**.0000**	**.0288**	**-.0001**	**-.0001**	**.0006**
Stddev	.0002	.0030	.0002	.0002	.000	.0014	.0000	.0001	.0001
%RSD	41.35	120.4	35.55	71.42	67.00	4.999	30.75	80.76	11.13
#1	-.0005	-.0009	-.0004	.0003	-.0001	.0292	-.0001	.0000	.0007
#2	-.0002	-.0059	-.0006	.0001	.0000	.0272	-.0001	-.0001	.0006
#3	-.0006	-.0006	-.0009	.0005	-.0001	.0299	-.0001	-.0002	.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0002**	**.0062**	**.0113**	**.0038**	**.0001**	**.0002**	**.0142**	**-.0001**	**.0002**
Stddev	.0002	.0006	.0197	.0168	.0000	.0000	.0039	.0001	.0004
%RSD	125.8	8.964	173.8	442.7	21.63	11.78	27.21	48.09	259.5
#1	.0000	.0061	.0091	.0223	.0001	.0002	.0123	-.0001	.0001
#2	-.0004	.0068	-.0072	-.0107	.0001	.0002	.0117	-.0002	.0006
#3	-.0001	.0057	.0321	-.0002	.0001	.0002	.0187	-.0001	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0016**	**.0024**	**.0085**	**.0210**	**.0000**	**.0001**	**-.0007**	**.0001**	**.0010**
Stddev	.0000	.0005	.0003	.0005	.0001	.0001	.0009	.0003	.0001
%RSD	2.087	20.84	3.639	2.151	459.2	73.22	132.0	439.5	6.835
#1	.0017	.0027	.0084	.0208	.0001	.0002	-.0017	-.0002	.0009
#2	.0016	.0026	.0089	.0215	-.0001	.0000	.0000	.0000	.0010
#3	.0017	.0018	.0083	.0207	.0000	.0001	-.0003	.0003	.0010
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: MP30376-MB1 Acquired: 5/20/2016 15:19:42 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2637.7**	**4884.0**	**39871.**	**3535.7**
Stddev	4.7	5.7	81.	13.8
%RSD	.17797	.11609	.20385	.39099
#1	2638.6	4887.0	39779.	3526.2
#2	2632.7	4887.5	39931.	3551.6
#3	2642.0	4877.4	39903.	3529.3

Zoom In Zoom Out

Sample Name: MP30376-B1 Acquired: 5/20/2016 15:24:16 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0470**	**27.31**	**1.890**	**2.100**	**.0523**	**26.24**	**.0491**	**.4991**	**.2046**
Stddev	.0006	.03	.003	.002	.0001	.12	.0001	.0014	.0005
%RSD	1.297	.1207	.1570	.1111	.1672	.4518	.2270	.2857	.2295
#1	.0470	27.34	1.893	2.102	.0523	26.11	.0492	.5005	.2050
#2	.0463	27.28	1.887	2.098	.0522	26.34	.0490	.4976	.2049
#3	.0476	27.30	1.890	2.101	.0524	26.27	.0491	.4991	.2041
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2615**	**26.05**	**25.64**	**25.57**	**.5096**	**.4823**	**24.82**	**.4954**	**.4699**
Stddev	.0006	.04	.10	.21	.0009	.0007	.09	.0010	.0012
%RSD	.2364	.1541	.4081	.8157	.1788	.1387	.3497	.1998	.2513
#1	.2612	26.01	25.52	25.44	.5086	.4830	24.90	.4964	.4686
#2	.2610	26.07	25.66	25.45	.5103	.4817	24.73	.4944	.4709
#3	.2622	26.08	25.72	25.81	.5098	.4822	24.84	.4953	.4702
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4815**	**1.915**	**.0277**	**.5156**	**.5084**	**.4862**	**1.894**	**.4646**	**.5012**
Stddev	.0017	.004	.0103	.0010	.0013	.0012	.002	.0005	.0009
%RSD	.3470	.1947	37.16	.1846	.2587	.2451	.1171	.1135	.1814
#1	.4814	1.917	.0215	.5157	.5094	.4848	1.896	.4640	.5019
#2	.4833	1.917	.0219	.5146	.5069	.4870	1.894	.4649	.5002
#3	.4799	1.911	.0395	.5165	.5089	.4867	1.892	.4648	.5016
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: MP30376-B1 Acquired: 5/20/2016 15:24:16 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2356.6**	**4761.5**	**38291.**	**3445.5**
Stddev	3.8	13.1	80.	19.6
%RSD	.15917	.27523	.20950	.56893
#1	2354.8	4746.6	38349.	3467.7
#2	2360.9	4771.1	38199.	3430.5
#3	2354.0	4766.8	38324.	3438.3

Zoom In Zoom Out

Sample Name: MP30376-B2 Acquired: 5/20/2016 15:28:32 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0467**	**27.44**	**1.902**	**2.110**	**.0526**	**26.37**	**.0496**	**.5021**	**.2064**
Stddev	.0004	.14	.002	.009	.0002	.12	.0002	.0011	.0008
%RSD	.8537	.5135	.1036	.4025	.3248	.4528	.3279	.2179	.3672
#1	.0468	27.48	1.902	2.110	.0526	26.46	.0494	.5014	.2056
#2	.0471	27.29	1.900	2.102	.0524	26.23	.0497	.5016	.2071
#3	.0463	27.57	1.904	2.119	.0528	26.41	.0496	.5034	.2065
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2644**	**26.20**	**25.91**	**25.74**	**.5158**	**.4853**	**24.88**	**.4985**	**.4745**
Stddev	.0017	.06	.13	.07	.0003	.0010	.13	.0004	.0009
%RSD	.6501	.2301	.5182	.2727	.0678	.2111	.5263	.0845	.1878
#1	.2664	26.19	26.01	25.78	.5156	.4842	24.84	.4985	.4740
#2	.2633	26.15	25.76	25.66	.5156	.4855	24.77	.4981	.4755
#3	.2635	26.27	25.97	25.79	.5162	.4862	25.03	.4989	.4739
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4849**	**1.930**	**.0213**	**.5207**	**.5116**	**.4910**	**1.915**	**.4665**	**.5069**
Stddev	.0025	.006	.0001	.0016	.0014	.0002	.004	.0009	.0013
%RSD	.5110	.2932	.3781	.3100	.2655	.0336	.2044	.1967	.2537
#1	.4823	1.931	.0213	.5197	.5118	.4911	1.912	.4657	.5055
#2	.4854	1.924	.0212	.5199	.5101	.4908	1.919	.4663	.5073
#3	.4872	1.935	.0214	.5226	.5128	.4910	1.913	.4675	.5080
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: MP30376-B2 Acquired: 5/20/2016 15:28:32 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2363.3**	**4788.1**	**38277.**	**3445.2**
Stddev	3.9	10.5	71.	5.8
%RSD	.16338	.22032	.18650	.16825
#1	2359.3	4780.6	38196.	3443.8
#2	2363.5	4800.1	38329.	3451.5
#3	2367.0	4783.5	38307.	3440.2

Zoom In Zoom Out

Sample Name: FA34002-1 Acquired: 5/20/2016 15:32:45 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0002**	**.0292**	**.0003**	**1.350**	**.0000**	**25.85**	**.0039**	**.0002**	**.0027**
Stddev	.0003	.0088	.0007	.008	.000	.15	.0000	.0001	.0002
%RSD	178.9	30.21	213.6	.6084	71.52	.5945	.7374	37.93	7.478
#1	-.0002	.0235	-.0002	1.356	.0000	25.91	.0039	.0002	.0027
#2	.0005	.0247	.0011	1.341	.0000	25.68	.0040	.0003	.0029
#3	.0002	.0393	.0000	1.355	-.0001	25.97	.0040	.0001	.0025

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0707**	**.1966**	**.5314**	**1.763**	**.0199**	**.0629**	**.5341**	**.0030**	**.0108**
Stddev	.0008	.0021	.0603	.009	.0001	.0001	.0115	.0001	.0005
%RSD	1.193	1.052	11.35	.4963	.3219	.1462	2.147	2.677	4.661
#1	.0714	.1970	.5614	1.766	.0200	.0629	.5442	.0031	.0102
#2	.0710	.1985	.4619	1.769	.0199	.0629	.5364	.0030	.0112
#3	.0697	.1944	.5708	1.753	.0199	.0628	.5216	.0030	.0110

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0082**	**.0073**	**1.539**	**.0236**	**.0404**	**.0025**	**-.0025**	**.0005**	F **14.37**
Stddev	.0007	.0003	.002	.0005	.0003	.0001	.0003	.0001	.03
%RSD	8.001	3.820	.1063	2.037	.7365	5.846	11.56	27.89	.2414
#1	.0083	.0076	1.538	.0231	.0407	.0024	-.0028	.0005	14.39
#2	.0075	.0071	1.541	.0237	.0401	.0027	-.0023	.0006	14.39
#3	.0088	.0072	1.538	.0240	.0404	.0024	-.0023	.0003	14.33

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2574.0**	**4878.7**	**39188.**	**3457.1**
Stddev	1.4	10.8	184.	18.5
%RSD	.05625	.22128	.46864	.53404
#1	2572.4	4890.1	38977.	3440.8
#2	2574.5	4868.6	39270.	3477.1
#3	2575.1	4877.6	39316.	3453.5

Zoom In Zoom Out

Sample Name: FA34002-2 Acquired: 5/20/2016 15:37:14 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0020**	**.0348**	**.0009**	**.1248**	**-.0001**	**20.24**	**.0064**	**.0003**	**.0061**
Stddev	.0002	.0002	.0004	.0004	.0000	.08	.0000	.0001	.0001
%RSD	7.932	.6797	45.30	.2866	87.10	.3995	.7337	24.71	.8592
#1	.0019	.0346	.0013	.1251	.0000	20.32	.0064	.0004	.0062
#2	.0020	.0348	.0010	.1249	.0000	20.25	.0064	.0003	.0061
#3	.0022	.0350	.0005	.1244	-.0001	20.16	.0064	.0003	.0061

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.3553**	**.2354**	**.3914**	**.7473**	**.0162**	**.0651**	**.8094**	**.0276**	**.0276**
Stddev	.0006	.0032	.0164	.0165	.0001	.0003	.0113	.0002	.0004
%RSD	.1599	1.344	4.195	2.210	.8029	.5129	1.393	.5679	1.457
#1	.3555	.2382	.3759	.7615	.0163	.0649	.8224	.0275	.0279
#2	.3546	.2320	.4086	.7292	.0160	.0649	.8032	.0274	.0272
#3	.3557	.2362	.3897	.7512	.0162	.0655	.8025	.0277	.0278

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0067**	**.0079**	**2.817**	**.0246**	**.0113**	**.0028**	**-.0045**	**.0004**	F **9.191**
Stddev	.0008	.0010	.012	.0007	.0000	.0001	.0006	.0000	.015
%RSD	11.99	12.23	.4397	2.731	.1965	4.454	12.54	4.943	.1644
#1	.0061	.0089	2.803	.0238	.0113	.0027	-.0039	.0004	9.199
#2	.0076	.0070	2.821	.0249	.0113	.0027	-.0045	.0004	9.174
#3	.0063	.0077	2.827	.0250	.0114	.0029	-.0050	.0004	9.201

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2596.6**	**4879.2**	**39092.**	**3438.8**
Stddev	11.0	14.4	162.	16.2
%RSD	.42403	.29559	.41431	.47159
#1	2586.9	4876.5	39007.	3421.1
#2	2608.6	4894.8	39279.	3442.6
#3	2594.3	4866.3	38991.	3452.8

Zoom In Zoom Out

Sample Name: MP30377-MB1 Acquired: 5/20/2016 15:41:42 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**.0069**	**-.0007**	**.0001**	**-.0001**	**.0163**	**-.0001**	**-.0001**	**.0004**
Stddev	.0002	.0069	.0001	.0002	.0000	.0023	.0000	.0001	.0002
%RSD	135.7	99.22	19.07	200.6	82.88	13.92	31.95	113.6	38.61
#1	-.0002	.0105	-.0008	.0001	.0000	.0161	.0000	.0000	.0006
#2	.0001	-.0010	-.0006	-.0001	-.0001	.0141	-.0001	-.0001	.0005
#3	-.0003	.0113	-.0008	.0004	.0000	.0186	-.0001	-.0001	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**.0049**	**.0324**	**.0046**	**.0001**	**.0000**	**-.0042**	**-.0002**	**.0007**
Stddev	.0000	.0020	.0453	.0232	.0000	.0000	.0079	.0001	.0001
%RSD	25.67	39.61	139.9	510.7	13.46	255.8	188.2	50.92	21.32
#1	-.0001	.0065	.0845	-.0222	.0001	.0000	-.0125	-.0002	.0007
#2	-.0001	.0055	.0104	.0158	.0001	.0000	-.0031	-.0001	.0005
#3	-.0001	.0027	.0022	.0201	.0001	.0000	.0031	-.0001	.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.0025**	**.0026**	**.0134**	**.0222**	**.0000**	**.0001**	**.0000**	**.0001**	**.0012**
Stddev	.0006	.0005	.0013	.0001	.0000	.0001	.001	.0001	.0001
%RSD	22.96	19.53	10.03	.6561	74.98	127.5	1251.	51.44	7.102
#1	.0025	.0020	.0148	.0220	.0000	.0000	-.0007	.0002	.0013
#2	.0020	.0026	.0132	.0223	.0001	.0002	.0002	.0001	.0011
#3	.0031	.0030	.0121	.0221	.0000	.0001	.0004	.0001	.0012
Check ?	Chk Fail	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.0025								
Low Limit	-.0025								

Zoom In Zoom Out

Sample Name: MP30377-MB1 Acquired: 5/20/2016 15:41:42 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2671.1**	**4975.0**	**40413.**	**3524.1**
Stddev	9.9	19.7	381.	30.7
%RSD	.37157	.39514	.94218	.87053
#1	2664.7	4956.3	40156.	3488.7
#2	2666.0	4973.2	40234.	3540.3
#3	2682.5	4995.5	40851.	3543.2

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: MP30377-B1 Acquired: 5/20/2016 15:46:16 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0468**	**27.46**	**1.882**	**2.112**	**.0522**	**26.49**	**.0492**	**.4995**	**.2050**
Stddev	.0003	.12	.005	.011	.0003	.18	.0002	.0006	.0003
%RSD	.6222	.4215	.2553	.5119	.6315	.6867	.3384	.1132	.1598
#1	.0470	27.43	1.885	2.114	.0525	26.45	.0492	.4992	.2053
#2	.0470	27.59	1.876	2.122	.0523	26.69	.0490	.4991	.2049
#3	.0465	27.36	1.885	2.100	.0519	26.33	.0493	.5001	.2047
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2632**	**26.15**	**25.95**	**25.78**	**.5105**	**.4828**	**24.80**	**.4936**	**.4703**
Stddev	.0008	.11	.15	.17	.0015	.0006	.10	.0012	.0023
%RSD	.3031	.4350	.5957	.6779	.2938	.1268	.4101	.2347	.4894
#1	.2631	26.07	25.95	25.67	.5122	.4822	24.82	.4926	.4682
#2	.2625	26.28	26.11	25.98	.5100	.4834	24.88	.4932	.4700
#3	.2641	26.10	25.80	25.68	.5094	.4827	24.68	.4949	.4727
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4806**	**1.913**	**.0265**	**.5180**	**.5116**	**.4853**	**1.898**	**.4646**	**.5050**
Stddev	.0013	.003	.0001	.0018	.0029	.0009	.006	.0009	.0027
%RSD	.2634	.1305	.5439	.3530	.5647	.1822	.3202	.1941	.5372
#1	.4818	1.916	.0264	.5173	.5118	.4863	1.894	.4653	.5034
#2	.4793	1.912	.0266	.5166	.5143	.4850	1.894	.4650	.5035
#3	.4806	1.912	.0265	.5200	.5086	.4846	1.905	.4636	.5082
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: MP30377-B1 Acquired: 5/20/2016 15:46:16 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2384.6**	**4839.3**	**38666.**	**3473.4**
Stddev	.6	7.1	77.	22.4
%RSD	.02463	.14656	.19982	.64547
#1	2384.4	4832.6	38664.	3461.0
#2	2384.2	4838.7	38744.	3460.0
#3	2385.3	4846.7	38590.	3499.3

Zoom In Zoom Out

Sample Name: FA34066-1 Acquired: 5/20/2016 15:50:30 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0006**	**132.1**	**.0250**	**1.928**	**.0044**	**38.34**	**.0046**	**.0068**	**.1510**
Stddev	.0001	.7	.0004	.012	.0001	.21	.0001	.0000	.0002
%RSD	12.64	.5191	1.568	.6178	1.520	.5484	2.259	.4291	.1141
#1	.0005	131.3	.0246	1.917	.0044	38.24	.0047	.0067	.1509
#2	.0006	132.1	.0252	1.928	.0043	38.20	.0047	.0068	.1510
#3	.0006	132.7	.0253	1.940	.0044	38.58	.0045	.0068	.1512

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0930**	**99.63**	**1.417**	**3.951**	**.7331**	**.0021**	**2.191**	**.0400**	**2.325**
Stddev	.0006	.49	.019	.009	.0017	.0002	.022	.0000	.003
%RSD	.6409	.4899	1.314	.2276	.2384	7.637	.9926	.0624	.1069
#1	.0924	99.16	1.399	3.942	.7311	.0022	2.166	.0400	2.322
#2	.0936	99.61	1.416	3.953	.7344	.0019	2.199	.0400	2.327
#3	.0930	100.1	1.436	3.959	.7337	.0022	2.207	.0400	2.326

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0040**	**-.0002**	**.8648**	**.0599**	**2.558**	**.5235**	**-.0043**	**.0516**	**1.673**
Stddev	.0006	.0001	.0024	.0002	.010	.0007	.0002	.0001	.001
%RSD	13.83	55.51	.2756	.2671	.3807	.1246	4.533	.1970	.0720
#1	.0035	-.0004	.8661	.0598	2.568	.5228	-.0044	.0517	1.672
#2	.0046	-.0001	.8663	.0598	2.549	.5240	-.0041	.0515	1.674
#3	.0039	-.0002	.8620	.0601	2.555	.5239	-.0045	.0516	1.674

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2343.5**	**10313.**	**81703.**	**7273.5**
Stddev	3.4	37.	188.	38.4
%RSD	.14311	.35442	.23045	.52832
#1	2341.2	10281.	81846.	7271.6
#2	2341.8	10304.	81489.	7312.8
#3	2347.3	10353.	81772.	7236.0

Zoom In Zoom Out

Sample Name: MP30377-D1 Acquired: 5/20/2016 15:54:57 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0004**	**144.3**	**.0206**	**2.074**	**.0048**	**43.00**	**.0048**	**.0057**	**.1693**
Stddev	.0002	.3	.0003	.003	.0000	.16	.0000	.0000	.0005
%RSD	47.56	.1884	1.615	.1590	.3665	.3608	.4684	.2209	.3194
#1	.0006	144.3	.0204	2.071	.0048	43.03	.0048	.0056	.1699
#2	.0005	144.1	.0210	2.075	.0047	42.84	.0048	.0057	.1689
#3	.0002	144.6	.0205	2.078	.0048	43.14	.0048	.0057	.1691

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0982**	**45.02**	**1.667**	**4.439**	**.5944**	**.0018**	**2.371**	**.0412**	**2.629**
Stddev	.0005	.22	.007	.038	.0027	.0001	.011	.0001	.005
%RSD	.4745	.4979	.4400	.8539	.4532	5.710	.4802	.3395	.1986
#1	.0976	45.06	1.659	4.442	.5975	.0019	2.371	.0412	2.628
#2	.0985	44.78	1.673	4.399	.5928	.0019	2.359	.0410	2.634
#3	.0984	45.23	1.669	4.475	.5929	.0017	2.382	.0413	2.624

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0008**	**.0033**	**1.038**	**.0407**	**2.685**	**.5861**	**-.0076**	**.0534**	**1.647**
Stddev	.0001	.0007	.004	.0003	.043	.0016	.0015	.0001	.004
%RSD	17.67	20.84	.3461	.6245	1.616	.2762	19.79	.1654	.2499
#1	.0008	.0025	1.041	.0409	2.734	.5880	-.0061	.0534	1.645
#2	.0010	.0034	1.034	.0407	2.654	.5851	-.0091	.0534	1.651
#3	.0007	.0039	1.039	.0404	2.666	.5853	-.0076	.0533	1.644

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2302.5**	**11365.**	**89833.**	**8041.4**
Stddev	2.0	19.	306.	44.4
%RSD	.08757	.17087	.34051	.55169
#1	2300.3	11348.	89482.	8003.5
#2	2303.0	11386.	89973.	8090.2
#3	2304.2	11360.	90044.	8030.6

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/20/2016 15:59:23 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2586**	**42.58**	**1.965**	**2.115**	**2.070**	**43.40**	**2.006**	**2.037**	**2.075**
Stddev	.0011	.12	.004	.004	.007	.02	.005	.002	.007
%RSD	.4386	.2736	.2083	.2055	.3246	.0486	.2340	.1127	.3229
#1	.2573	42.56	1.967	2.112	2.071	43.43	2.011	2.040	2.070
#2	.2595	42.47	1.960	2.112	2.063	43.39	2.002	2.035	2.082
#3	.2590	42.70	1.967	2.120	2.076	43.40	2.005	2.037	2.072
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.097**	**43.27**	**43.18**	**43.25**	**2.055**	**2.040**	**40.98**	**1.981**	**1.996**
Stddev	.006	.12	.21	.18	.012	.002	.11	.004	.003
%RSD	.2771	.2792	.4824	.4087	.5839	.1038	.2588	.1898	.1302
#1	2.091	43.20	43.16	43.44	2.046	2.041	40.99	1.986	1.998
#2	2.103	43.20	42.99	43.21	2.069	2.038	40.87	1.978	1.997
#3	2.098	43.41	43.40	43.09	2.051	2.042	41.08	1.981	1.993
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.975**	**1.990**	**2.057**	**2.083**	**2.164**	**2.037**	**1.999**	**2.013**	**2.078**
Stddev	.002	.004	.002	.002	.006	.009	.006	.001	.004
%RSD	.1157	.2072	.0791	.0813	.2915	.4356	.2822	.0566	.1938
#1	1.975	1.992	2.059	2.085	2.163	2.028	2.002	2.012	2.082
#2	1.973	1.993	2.055	2.081	2.158	2.046	1.992	2.014	2.074
#3	1.978	1.985	2.057	2.083	2.171	2.036	2.002	2.014	2.079
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/20/2016 15:59:23 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2211.5**	**4671.4**	**36979.**	**3356.6**
Stddev	5.0	2.5	171.	14.9
%RSD	.22557	.05299	.46225	.44412
#1	2212.5	4671.8	37096.	3360.6
#2	2206.0	4668.7	36783.	3369.1
#3	2215.9	4673.6	37058.	3340.1

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/20/2016 16:03:35 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**.0192**	**.0008**	**.0013**	**.0007**	**.0274**	**.0002**	**.0003**	**.0004**
Stddev	.0002	.0019	.0012	.0004	.0001	.0043	.0001	.0000	.0002
%RSD	142.3	9.680	139.6	29.57	12.30	15.69	26.94	13.90	48.04
#1	.0000	.0187	.0018	.0016	.0008	.0292	.0003	.0003	.0004
#2	-.0004	.0177	.0012	.0014	.0007	.0305	.0002	.0003	.0002
#3	-.0001	.0213	-.0005	.0009	.0006	.0225	.0002	.0003	.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**.0327**	**.0033**	**.0195**	**.0005**	F **.0016**	**.0121**	**.0002**	**.0003**
Stddev	.0001	.0069	.0526	.0204	.0001	.0003	.0022	.0002	.0005
%RSD	414.4	21.01	1589.	104.8	11.26	21.94	17.91	81.63	184.7
#1	.0001	.0396	-.0116	.0416	.0005	.0019	.0138	.0004	-.0003
#2	.0001	.0324	-.0402	.0154	.0005	.0016	.0128	.0001	.0007
#3	-.0001	.0259	.0617	.0014	.0004	.0012	.0097	.0001	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.0028**	**.0014**	**.0028**	**.0002**	**.0009**	**.0012**	**.0011**	**.0003**	**.0010**
Stddev	.0005	.0007	.0005	.0004	.0002	.0001	.0005	.0001	.0001
%RSD	18.99	52.29	16.80	177.5	17.39	4.238	42.21	33.16	8.508
#1	.0028	.0020	.0032	.0006	.0011	.0012	.0015	.0004	.0010
#2	.0033	.0006	.0029	.0003	.0008	.0012	.0006	.0004	.0011
#3	.0023	.0015	.0023	-.0002	.0009	.0011	.0012	.0002	.0009
Check ?	Chk Fail	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.0020								
Low Limit	-.0020								

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/20/2016 16:03:35 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2645.1**	**5006.4**	**40215.**	**3542.7**
Stddev	3.2	11.5	93.	27.3
%RSD	.12143	.23028	.23173	.77081
#1	2646.0	4993.2	40174.	3535.4
#2	2641.5	5012.3	40150.	3519.8
#3	2647.7	5013.8	40322.	3572.9

Zoom In Zoom Out

Sample Name: MP30377-SD1 Acquired: 5/20/2016 16:08:08 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0006**	**230.9**	**.0462**	**3.358**	**.0078**	**68.36**	**.0087**	**.0135**	**.2771**
Stddev	.0016	.5	.0014	.013	.0002	.20	.0001	.0003	.0018
%RSD	283.5	.2280	3.066	.4005	2.184	.2995	1.370	2.470	.6595
#1	.0017	231.4	.0450	3.374	.0076	68.51	.0087	.0136	.2751
#2	-.0013	231.0	.0458	3.350	.0079	68.43	.0089	.0138	.2787
#3	.0013	230.4	.0478	3.351	.0078	68.12	.0086	.0131	.2774

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.1639**	**182.1**	**2.420**	**7.150**	**1.350**	**.0053**	**3.947**	**.0741**	**2.497**
Stddev	.0010	.7	.124	.064	.005	.0006	.033	.0006	.003
%RSD	.6045	.3792	5.103	.8920	.3948	11.48	.8426	.7749	.1194
#1	.1636	182.5	2.328	7.085	1.347	.0058	3.941	.0746	2.500
#2	.1631	182.4	2.560	7.153	1.357	.0046	3.982	.0742	2.496
#3	.1650	181.3	2.371	7.212	1.348	.0053	3.916	.0735	2.494

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0128**	**.0045**	**1.557**	**.1116**	**4.567**	**.9553**	**-.0041**	**.0930**	**3.163**
Stddev	.0044	.0043	.003	.0019	.009	.0015	.0023	.0006	.002
%RSD	34.06	95.22	.2041	1.733	.1910	.1544	55.13	.6400	.0616
#1	.0179	.0004	1.560	.1095	4.576	.9537	-.0020	.0931	3.164
#2	.0105	.0042	1.557	.1119	4.558	.9558	-.0038	.0923	3.161
#3	.0102	.0090	1.553	.1133	4.568	.9565	-.0065	.0935	3.165

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2521.4**	**6195.3**	**49544.**	**4397.3**
Stddev	3.8	12.7	47.	21.5
%RSD	.14959	.20448	.09424	.48832
#1	2518.5	6191.9	49564.	4409.4
#2	2520.1	6184.7	49491.	4372.5
#3	2525.7	6209.4	49578.	4410.0

Zoom In Zoom Out

Sample Name: MP30377-PS1 Acquired: 5/20/2016 16:12:28 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0232**	**131.4**	**.0704**	**2.039**	**.0291**	**40.28**	**.0275**	**.0299**	**.1752**
Stddev	.0002	.3	.0006	.006	.0002	.05	.0000	.0001	.0007
%RSD	.8688	.2277	.8813	.3068	.5242	.1363	.1493	.3375	.4234
#1	.0233	131.1	.0700	2.038	.0289	40.22	.0275	.0298	.1755
#2	.0230	131.4	.0701	2.033	.0292	40.33	.0274	.0299	.1743
#3	.0233	131.7	.0711	2.046	.0291	40.28	.0275	.0300	.1757

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.1425**	**99.59**	**6.402**	**6.353**	**.7563**	**.0466**	**7.030**	**.0845**	**2.362**
Stddev	.0008	.06	.044	.068	.0023	.0001	.011	.0000	.007
%RSD	.5528	.0555	.6844	1.077	.3091	.1854	.1615	.0549	.2882
#1	.1425	99.53	6.353	6.284	.7562	.0466	7.023	.0845	2.362
#2	.1434	99.64	6.418	6.421	.7540	.0467	7.024	.0845	2.369
#3	.1418	99.59	6.436	6.355	.7587	.0466	7.043	.0844	2.355

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0509**	**.0460**	**.8785**	**.0814**	**2.520**	**.5699**	**.0857**	**.0733**	**1.788**
Stddev	.0007	.0012	.0006	.0005	.021	.0009	.0011	.0003	.003
%RSD	1.371	2.507	.0628	.5569	.8323	.1559	1.296	.3730	.1439
#1	.0505	.0453	.8784	.0810	2.508	.5706	.0862	.0732	1.785
#2	.0517	.0454	.8780	.0819	2.508	.5689	.0865	.0730	1.790
#3	.0504	.0473	.8791	.0812	2.544	.5701	.0844	.0735	1.788

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2302.7**	**10128.**	**80403.**	**7298.4**
Stddev	3.8	10.	55.	39.2
%RSD	.16329	.09920	.06859	.53744
#1	2298.7	10121.	80345.	7328.7
#2	2303.2	10139.	80409.	7254.1
#3	2306.1	10123.	80455.	7312.5

Zoom In Zoom Out

Sample Name: MP30377-S1 Acquired: 5/20/2016 16:16:53 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0210**	**156.9**	**.8084**	**2.944**	**.0274**	**51.24**	**.0251**	**.2086**	**.2460**
Stddev	.0001	.2	.0004	.033	.0000	.08	.0001	.0001	.0013
%RSD	.6124	.1365	.0487	1.134	.0819	.1501	.2965	.0250	.5474
#1	.0210	157.1	.8087	2.971	.0274	51.19	.0252	.2086	.2453
#2	.0210	156.7	.8080	2.955	.0274	51.33	.0252	.2087	.2452
#3	.0208	156.8	.8085	2.907	.0274	51.20	.0251	.2086	.2476

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.2288**	**56.74**	**12.94**	**15.54**	**.8293**	**.1884**	**13.24**	**.2424**	**3.225**
Stddev	.0003	.09	.05	.03	.0049	.0001	.03	.0002	.006
%RSD	.1107	.1645	.3501	.2015	.5925	.0666	.2164	.0992	.1882
#1	.2290	56.69	12.98	15.51	.8275	.1883	13.26	.2425	3.219
#2	.2285	56.85	12.93	15.57	.8256	.1883	13.25	.2421	3.228
#3	.2289	56.68	12.89	15.55	.8349	.1885	13.21	.2426	3.230

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0941**	**.8052**	**1.166**	**.2578**	**2.929**	**.7187**	**1.835**	**.2461**	**1.844**
Stddev	.0010	.0010	.001	.0002	.030	.0032	.004	.0006	.003
%RSD	1.022	.1187	.0440	.0695	1.038	.4456	.2316	.2528	.1521
#1	.0931	.8052	1.166	.2579	2.916	.7181	1.832	.2459	1.841
#2	.0950	.8062	1.167	.2576	2.964	.7158	1.834	.2457	1.844
#3	.0943	.8043	1.166	.2580	2.907	.7221	1.840	.2468	1.846

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2201.9**	**11197.**	**88609.**	**8018.5**
Stddev	4.1	8.	642.	41.6
%RSD	.18637	.07049	.72423	.51893
#1	2204.1	11188.	89100.	7999.2
#2	2204.5	11201.	88845.	7990.1
#3	2197.2	11202.	87883.	8066.3

Zoom In Zoom Out

Sample Name: MP30377-S2 Acquired: 5/20/2016 16:21:22 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0218**	**159.7**	**.8213**	**2.954**	**.0277**	**136.7**	**.0249**	**.2074**	**.2491**
Stddev	.0003	.4	.0009	.024	.0001	.4	.0001	.0003	.0011
%RSD	1.499	.2232	.1142	.8233	.3443	.2609	.4289	.1234	.4242
#1	.0215	159.3	.8223	2.942	.0276	137.1	.0249	.2076	.2478
#2	.0216	159.9	.8213	2.982	.0278	136.7	.0250	.2071	.2497
#3	.0221	160.0	.8204	2.939	.0278	136.3	.0248	.2075	.2496

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.2064**	**68.36**	**13.27**	**15.53**	**.8197**	**.1906**	**13.58**	**.2398**	**3.112**
Stddev	.0003	.11	.06	.07	.0045	.0002	.04	.0003	.009
%RSD	.1522	.1588	.4452	.4230	.5468	.1112	.3036	.1349	.3054
#1	.2065	68.24	13.24	15.45	.8165	.1907	13.53	.2400	3.106
#2	.2067	68.39	13.23	15.56	.8248	.1906	13.58	.2394	3.106
#3	.2061	68.46	13.33	15.57	.8177	.1903	13.62	.2399	3.123

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0979**	**.8141**	**1.220**	**.2706**	**2.970**	**.7385**	**1.781**	**.2498**	**1.867**
Stddev	.0004	.0011	.005	.0009	.020	.0026	.002	.0006	.005
%RSD	.4252	.1306	.3854	.3341	.6644	.3473	.1247	.2432	.2934
#1	.0983	.8152	1.223	.2696	2.991	.7368	1.779	.2491	1.864
#2	.0975	.8130	1.223	.2710	2.951	.7414	1.782	.2499	1.865
#3	.0978	.8140	1.215	.2713	2.969	.7372	1.783	.2503	1.873

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2149.3**	**10747.**	**85047.**	**7716.0**
Stddev	3.5	32.	296.	10.1
%RSD	.16385	.29940	.34755	.13108
#1	2145.5	10712.	85070.	7725.6
#2	2152.4	10753.	84740.	7717.2
#3	2150.1	10775.	85330.	7705.4

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: FA34066-2 Acquired: 5/20/2016 16:25:57 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0008**	**138.4**	**.0171**	**1.543**	**.0046**	**26.50**	**.0013**	**.0040**	**.1389**
Stddev	.0001	.1	.0005	.005	.0001	.06	.0000	.0001	.0005
%RSD	7.909	.0424	2.806	.3220	1.292	.2444	3.067	1.692	.3453
#1	-.0007	138.4	.0170	1.543	.0045	26.51	.0013	.0040	.1384
#2	-.0008	138.3	.0167	1.538	.0046	26.43	.0014	.0040	.1388
#3	-.0008	138.4	.0176	1.548	.0045	26.56	.0013	.0041	.1394

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0218**	**40.44**	**.9499**	**3.321**	**.2914**	**.0014**	**2.292**	**.0347**	**.4531**
Stddev	.0001	.06	.0207	.022	.0018	.0000	.004	.0000	.0015
%RSD	.4294	.1408	2.177	.6775	.6257	1.197	.1551	.1282	.3367
#1	.0218	40.50	.9445	3.340	.2908	.0014	2.295	.0346	.4514
#2	.0219	40.43	.9727	3.327	.2899	.0014	2.288	.0347	.4538
#3	.0217	40.38	.9324	3.296	.2934	.0014	2.293	.0347	.4542

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0017**	**.0024**	**1.021**	**.0122**	**2.563**	**.5961**	**-.0070**	**.0498**	**.1276**
Stddev	.0004	.0007	.001	.0001	.032	.0019	.0015	.0004	.0001
%RSD	24.01	31.13	.0989	.4175	1.236	.3252	21.80	.7289	.1056
#1	-.0013	.0016	1.020	.0123	2.590	.5959	-.0062	.0498	.1276
#2	-.0021	.0030	1.022	.0122	2.528	.5943	-.0060	.0494	.1278
#3	-.0018	.0026	1.022	.0123	2.571	.5981	-.0087	.0502	.1275

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2311.4**	**11095.**	**87535.**	**7732.9**
Stddev	3.9	11.	549.	4.9
%RSD	.16844	.10015	.62681	.06331
#1	2312.8	11094.	87591.	7727.2
#2	2314.4	11107.	88054.	7735.7
#3	2307.0	11085.	86961.	7735.8

Zoom In Zoom Out

Sample Name: FA34066-3 Acquired: 5/20/2016 16:30:24 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0003**	**45.61**	**.0059**	**.1945**	**.0008**	**1.760**	**-.0002**	**.0018**	**.0397**
Stddev	.0001	.11	.0006	.0007	.0000	.002	.0000	.0000	.0003
%RSD	40.66	.2509	9.538	.3371	3.156	.1036	14.73	2.227	.7587
#1	-.0003	45.52	.0066	.1951	.0007	1.758	-.0003	.0017	.0393
#2	-.0001	45.74	.0055	.1947	.0007	1.762	-.0002	.0018	.0397
#3	-.0003	45.57	.0058	.1938	.0008	1.759	-.0002	.0018	.0399

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0067**	**24.51**	**.5408**	**1.060**	**.0937**	**.0016**	**.1788**	**.0133**	**.0316**
Stddev	.0001	.07	.0183	.015	.0004	.0000	.0029	.0002	.0003
%RSD	1.350	.2696	3.376	1.425	.4129	3.003	1.637	1.255	1.052
#1	.0066	24.56	.5576	1.077	.0935	.0015	.1821	.0135	.0314
#2	.0068	24.53	.5435	1.047	.0941	.0016	.1774	.0134	.0314
#3	.0067	24.44	.5214	1.057	.0935	.0016	.1767	.0131	.0320

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0005**	**.0007**	**2.007**	**.0189**	**.3230**	**.6945**	**-.0011**	**.0337**	**.0222**
Stddev	.0007	.0010	.001	.0002	.0012	.0011	.0011	.0004	.0001
%RSD	136.1	135.9	.0564	.9338	.3636	.1542	100.1	1.129	.4852
#1	.0008	.0004	2.007	.0191	.3231	.6948	.0001	.0338	.0221
#2	-.0003	.0018	2.009	.0187	.3242	.6954	-.0021	.0340	.0222
#3	.0010	-.0001	2.006	.0190	.3218	.6933	-.0013	.0332	.0223

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2535.6**	**5266.9**	**42176.**	**3695.1**
Stddev	5.2	11.2	154.	18.6
%RSD	.20463	.21254	.36445	.50439
#1	2533.4	5255.2	42054.	3674.6
#2	2541.5	5268.1	42348.	3699.7
#3	2531.8	5277.5	42124.	3711.0

Zoom In Zoom Out

Sample Name: FA34066-4 Acquired: 5/20/2016 16:34:46 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0004**	**48.77**	**.0066**	**.2094**	**.0008**	**25.03**	**-.0003**	**.0020**	**.0453**
Stddev	.0001	.16	.0002	.0008	.0000	.03	.0000	.0001	.0002
%RSD	31.99	.3382	3.446	.3647	3.206	.1321	15.19	4.458	.4930
#1	-.0005	48.78	.0069	.2091	.0009	24.99	-.0003	.0019	.0450
#2	-.0005	48.93	.0065	.2103	.0008	25.06	-.0003	.0021	.0455
#3	-.0003	48.60	.0064	.2088	.0008	25.04	-.0002	.0021	.0453

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0078**	**27.05**	**.4818**	**1.589**	**.1010**	**.0017**	**.1194**	**.0138**	**.0329**
Stddev	.0000	.13	.0410	.016	.0005	.0001	.0058	.0001	.0009
%RSD	.4980	.4928	8.517	1.030	.4513	4.167	4.866	.4270	2.827
#1	.0077	26.99	.5125	1.572	.1005	.0016	.1251	.0139	.0321
#2	.0078	27.21	.4978	1.588	.1014	.0017	.1135	.0138	.0339
#3	.0078	26.96	.4352	1.605	.1010	.0017	.1195	.0138	.0326

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0018**	**.0020**	**2.858**	**.0188**	**.3750**	**.7808**	**-.0019**	**.0398**	**.0241**
Stddev	.0013	.0019	.006	.0004	.0016	.0002	.0012	.0002	.0001
%RSD	72.44	97.06	.2201	2.222	.4169	.0258	65.55	.5826	.5352
#1	.0004	.0009	2.865	.0188	.3759	.7811	-.0022	.0395	.0240
#2	.0030	.0042	2.854	.0192	.3759	.7807	-.0005	.0398	.0241
#3	.0020	.0008	2.854	.0183	.3732	.7808	-.0029	.0400	.0243

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2479.6**	**5287.8**	**41960.**	**3723.0**
Stddev	6.6	15.2	64.	7.0
%RSD	.26564	.28801	.15279	.18826
#1	2475.3	5276.0	41887.	3720.5
#2	2476.3	5282.3	41991.	3717.6
#3	2487.2	5305.0	42004.	3730.9

Zoom In Zoom Out

Sample Name: FA34066-5 Acquired: 5/20/2016 16:39:10 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0015**	**85.26**	**.0157**	**.9341**	**.0025**	**F 851.0**	**.0038**	**.0057**	**.1143**
Stddev	.0001	.06	.0005	.0012	.0000	10.0	.0000	.0001	.0005
%RSD	5.242	.0712	3.486	.1314	.9809	1.178	.5948	1.261	.4372
#1	.0016	85.21	.0159	.9332	.0025	862.5	.0038	.0057	.1144
#2	.0014	85.23	.0150	.9355	.0025	844.2	.0038	.0057	.1137
#3	.0016	85.33	.0160	.9336	.0025	846.3	.0038	.0056	.1147

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0470**	**33.10**	**2.570**	**9.103**	**.3935**	**.0024**	**1.856**	**.0332**	**.6384**
Stddev	.0004	.05	.011	.028	.0011	.0002	.010	.0001	.0010
%RSD	.8302	.1449	.4331	.3065	.2828	6.334	.5322	.2432	.1500
#1	.0475	33.11	2.581	9.135	.3941	.0023	1.865	.0331	.6395
#2	.0468	33.05	2.570	9.084	.3922	.0026	1.858	.0333	.6376
#3	.0468	33.14	2.558	9.091	.3942	.0024	1.845	.0333	.6382

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0013**	**.0067**	**1.737**	**.0224**	**1.881**	**.8313**	**-.0018**	**.0732**	**.6663**
Stddev	.0005	.0006	.003	.0003	.006	.0020	.0018	.0003	.0006
%RSD	42.04	8.287	.1413	1.496	.2977	.2352	100.0	.4588	.0906
#1	-.0019	.0063	1.736	.0222	1.876	.8333	-.0003	.0732	.6660
#2	-.0013	.0065	1.735	.0222	1.881	.8294	-.0039	.0728	.6659
#3	-.0008	.0073	1.739	.0228	1.887	.8311	-.0013	.0735	.6670

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2008.9**	**6042.5**	**47008.**	**4389.8**
Stddev	3.4	4.8	67.	22.7
%RSD	.16933	.07953	.14261	.51640
#1	2007.2	6037.0	46967.	4366.0
#2	2006.6	6044.7	47086.	4411.2
#3	2012.8	6045.9	46973.	4392.1

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: FA34066-6 Acquired: 5/20/2016 16:43:39 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0020**	**107.6**	**.0175**	**.8792**	**.0025**	**162.6**	**.0006**	**.0058**	**.1100**
Stddev	.0016	.6	.0021	.0029	.0003	.6	.0003	.0000	.0011
%RSD	83.82	.5988	11.77	.3275	10.81	.3643	45.16	.5859	1.043
#1	-.0001	107.2	.0182	.8825	.0027	162.6	.0006	.0058	.1088
#2	-.0025	108.4	.0151	.8775	.0022	163.2	.0003	.0058	.1111
#3	-.0032	107.3	.0190	.8776	.0027	162.0	.0009	.0058	.1101

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0578**	**41.85**	**1.131**	**4.877**	**.3216**	**.0019**	**.9952**	**.0343**	**.1583**
Stddev	.0016	.22	.054	.031	.0008	.0001	.0249	.0004	.0071
%RSD	2.784	.5319	4.738	.6393	.2514	7.513	2.505	1.078	4.484
#1	.0589	41.69	1.142	4.906	.3212	.0020	1.012	.0339	.1661
#2	.0585	42.10	1.073	4.880	.3225	.0018	1.007	.0344	.1522
#3	.0559	41.75	1.179	4.844	.3211	.0020	.9665	.0347	.1566

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0026**	**.0040**	**1.820**	**.0229**	**1.616**	**.8878**	**.0041**	**.0588**	**.2276**
Stddev	.0052	.0044	.004	.0012	.009	.0015	.0014	.0005	.0001
%RSD	203.7	110.4	.2229	5.443	.5608	.1744	34.16	.7809	.0598
#1	.0085	.0032	1.824	.0238	1.611	.8865	.0047	.0585	.2275
#2	-.0002	.0000	1.816	.0215	1.626	.8874	.0050	.0593	.2277
#3	-.0007	.0087	1.820	.0234	1.609	.8895	.0025	.0585	.2275

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2533.9**	**5324.6**	**42006.**	**3696.5**
Stddev	1.2	3.9	228.	26.7
%RSD	.04547	.07405	.54170	.72352
#1	2532.6	5323.7	42132.	3719.9
#2	2534.3	5321.2	41743.	3667.3
#3	2534.7	5329.0	42142.	3702.3

Zoom In Zoom Out

Sample Name: FA34066-7 Acquired: 5/20/2016 16:48:05 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0016**	**238.9**	**.0290**	**2.295**	**.0076**	**71.81**	**.0014**	**.0108**	**.2377**
Stddev	.0005	.3	.0004	.007	.0002	.18	.0002	.0002	.0009
%RSD	32.48	.1263	1.546	.3230	3.127	.2502	16.57	2.139	.3796
#1	-.0013	239.2	.0287	2.304	.0075	72.00	.0013	.0108	.2377
#2	-.0013	238.9	.0287	2.293	.0079	71.78	.0012	.0111	.2368
#3	-.0022	238.6	.0295	2.289	.0074	71.65	.0016	.0106	.2386

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0087**	**71.78**	**2.117**	**6.543**	**.5452**	**.0010**	**3.466**	**.0715**	**.1501**
Stddev	.0010	.20	.070	.007	.0007	.0003	.055	.0003	.0028
%RSD	12.08	.2803	3.329	.1006	.1302	26.93	1.577	.4184	1.880
#1	.0099	72.01	2.164	6.537	.5444	.0013	3.529	.0713	.1477
#2	.0082	71.63	2.152	6.543	.5457	.0008	3.434	.0714	.1495
#3	.0080	71.70	2.036	6.550	.5454	.0010	3.434	.0719	.1532

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0013**	**.0007**	**1.571**	**.0200**	**4.156**	**1.181**	**.0019**	**.0864**	**.1131**
Stddev	.0029	.0035	.001	.0009	.015	.002	.0047	.0004	.0008
%RSD	217.6	520.9	.0595	4.620	.3588	.1458	250.1	.4400	.7442
#1	.0010	.0023	1.570	.0209	4.169	1.182	.0071	.0867	.1127
#2	-.0045	-.0033	1.571	.0191	4.159	1.179	-.0020	.0866	.1125
#3	-.0004	.0031	1.572	.0202	4.139	1.181	.0005	.0860	.1140

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2519.3**	**6087.5**	**48090.**	**4226.5**
Stddev	.6	5.9	82.	10.8
%RSD	.02360	.09745	.17146	.25533
#1	2519.3	6088.3	48068.	4238.4
#2	2518.7	6081.2	48020.	4223.7
#3	2519.9	6093.0	48181.	4217.3

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/20/2016 16:52:29 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2570**	**41.96**	**1.970**	**2.095**	**2.050**	**42.77**	**2.002**	**2.021**	**2.072**
Stddev	.0003	.26	.008	.014	.012	.29	.006	.006	.006
%RSD	.1293	.6111	.3915	.6526	.5769	.6889	.2980	.2916	.3152
#1	.2571	41.76	1.978	2.085	2.050	42.56	2.006	2.027	2.065
#2	.2566	41.87	1.967	2.089	2.039	42.64	2.003	2.020	2.073
#3	.2572	42.25	1.964	2.111	2.062	43.10	1.995	2.015	2.078
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.076**	**42.89**	**42.46**	**42.52**	**2.057**	**2.025**	**40.74**	**1.984**	**1.984**
Stddev	.003	.15	.25	.33	.003	.005	.15	.007	.006
%RSD	.1476	.3607	.5831	.7830	.1339	.2653	.3762	.3397	.3055
#1	2.079	42.78	42.23	42.48	2.054	2.031	40.61	1.992	1.989
#2	2.073	42.83	42.45	42.21	2.059	2.023	40.71	1.981	1.986
#3	2.075	43.07	42.72	42.87	2.057	2.021	40.91	1.979	1.977
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.973**	**1.997**	**2.045**	**2.064**	**2.138**	**2.044**	**1.990**	**2.021**	**2.053**
Stddev	.009	.008	.009	.006	.011	.002	.008	.005	.007
%RSD	.4681	.3924	.4448	.2693	.5244	.0734	.4105	.2356	.3299
#1	1.983	2.006	2.055	2.067	2.131	2.043	1.997	2.017	2.053
#2	1.971	1.990	2.039	2.066	2.133	2.044	1.991	2.022	2.060
#3	1.965	1.995	2.039	2.057	2.151	2.046	1.981	2.026	2.047
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/20/2016 16:52:29 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2229.1**	**4693.1**	**37091.**	**3394.8**
Stddev	10.7	22.6	140.	33.2
%RSD	.47928	.48103	.37808	.97687
#1	2216.9	4667.1	37112.	3416.3
#2	2233.5	4704.8	37220.	3411.6
#3	2236.8	4707.4	36942.	3356.6

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/20/2016 16:56:41 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**.0163**	**.0005**	**.0007**	**.0003**	**.0247**	**.0002**	**.0002**	**.0003**
Stddev	.0003	.0089	.0006	.0003	.0001	.0030	.0000	.0000	.0002
%RSD	210.9	54.77	116.9	37.43	33.38	12.04	14.08	18.00	62.15
#1	-.0004	.0061	-.0002	.0009	.0004	.0224	.0002	.0002	.0006
#2	-.0001	.0225	.0010	.0008	.0004	.0281	.0002	.0002	.0003
#3	.0001	.0203	.0009	.0004	.0002	.0237	.0001	.0001	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**.0186**	**-.0172**	**.0454**	**.0004**	F **.0015**	**.0028**	**.0002**	**.0005**
Stddev	.000	.0055	.0284	.0362	.0000	.0004	.0106	.0001	.0005
%RSD	2983.	29.35	165.0	79.73	6.636	26.27	374.2	42.09	107.3
#1	-.0001	.0228	.0148	.0800	.0004	.0020	-.0033	.0003	.0004
#2	-.0001	.0206	-.0269	.0482	.0004	.0014	-.0033	.0002	.0000
#3	.0002	.0124	-.0394	.0079	.0004	.0012	.0151	.0002	.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.0030**	**.0008**	**.0020**	**.0004**	**.0006**	**.0009**	**.0010**	**.0003**	**.0009**
Stddev	.0005	.0005	.0004	.0002	.0001	.0001	.0007	.0001	.0001
%RSD	15.31	62.99	18.92	55.91	16.75	11.78	71.11	33.61	13.67
#1	.0034	.0007	.0022	.0006	.0006	.0010	.0002	.0002	.0010
#2	.0025	.0013	.0023	.0003	.0006	.0008	.0012	.0002	.0009
#3	.0031	.0003	.0016	.0002	.0005	.0008	.0016	.0004	.0008
Check ?	Chk Fail	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.0020								
Low Limit	-.0020								

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/20/2016 16:56:41 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2618.4**	**4951.9**	**39225.**	**3453.5**
Stddev	10.7	29.2	95.	16.0
%RSD	.40994	.59011	.24132	.46349
#1	2606.0	4918.4	39306.	3440.6
#2	2624.2	4972.3	39121.	3448.5
#3	2624.9	4964.9	39249.	3471.4

Zoom In Zoom Out

Sample Name: FA34066-8 Acquired: 5/20/2016 17:01:15 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0007**	**124.7**	**.0158**	**1.434**	**.0043**	**14.67**	**.0009**	**.0033**	**.1280**
Stddev	.0001	.1	.0003	.003	.0000	.04	.0000	.0000	.0003
%RSD	20.40	.0894	1.915	.1982	.9229	.2678	3.530	.6205	.2483
#1	-.0006	124.6	.0156	1.432	.0044	14.70	.0009	.0033	.1278
#2	-.0006	124.8	.0162	1.437	.0043	14.68	.0009	.0033	.1284
#3	-.0008	124.8	.0157	1.432	.0043	14.62	.0009	.0033	.1278

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0049**	**36.43**	**1.133**	**2.753**	**.3292**	**.0006**	**2.487**	**.0292**	**.2123**
Stddev	.0001	.04	.023	.021	.0013	.0001	.009	.0002	.0016
%RSD	2.204	.1233	1.999	.7676	.4023	16.03	.3782	.5200	.7746
#1	.0050	36.48	1.112	2.772	.3280	.0006	2.479	.0294	.2138
#2	.0048	36.39	1.157	2.757	.3306	.0008	2.485	.0292	.2105
#3	.0050	36.43	1.131	2.730	.3289	.0006	2.498	.0291	.2126

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0020**	**.0023**	**.8441**	**.0106**	**2.369**	**.5194**	**-.0061**	**.0440**	**.0656**
Stddev	.0009	.0001	.0020	.0001	.023	.0004	.0010	.0001	.0002
%RSD	46.65	4.122	.2329	.8948	.9589	.0766	15.84	.2226	.3613
#1	-.0028	.0023	.8439	.0105	2.382	.5190	-.0062	.0441	.0658
#2	-.0022	.0022	.8461	.0106	2.342	.5197	-.0051	.0441	.0653
#3	-.0010	.0023	.8422	.0106	2.381	.5197	-.0071	.0439	.0656

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2330.0**	**11228.**	**88719.**	**7892.2**
Stddev	2.5	14.	282.	59.2
%RSD	.10807	.12171	.31813	.74956
#1	2328.5	11238.	88752.	7825.7
#2	2332.9	11212.	88421.	7938.9
#3	2328.6	11233.	88983.	7911.9

Zoom In Zoom Out

Sample Name: FA34066-9 Acquired: 5/20/2016 17:05:43 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0006**	**145.3**	**.0181**	**1.706**	**.0048**	**228.0**	**.0025**	**.0045**	**.1519**
Stddev	.0001	.4	.0006	.009	.0000	2.5	.0000	.0001	.0004
%RSD	18.57	.2505	3.319	.5058	.6289	1.083	.9087	1.172	.2687
#1	-.0005	145.3	.0175	1.702	.0048	230.0	.0025	.0045	.1519
#2	-.0007	144.9	.0180	1.701	.0048	228.7	.0025	.0045	.1524
#3	-.0006	145.7	.0187	1.716	.0048	225.2	.0026	.0044	.1515

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.6485**	**42.92**	**1.296**	**4.642**	**.8625**	**.0015**	**2.270**	**.0375**	**.9776**
Stddev	.0022	.11	.008	.030	.0020	.0001	.010	.0002	.0048
%RSD	.3415	.2586	.6385	.6450	.2332	5.516	.4256	.4886	.4863
#1	.6496	43.01	1.297	4.668	.8603	.0014	2.276	.0377	.9743
#2	.6460	42.80	1.288	4.609	.8628	.0015	2.259	.0376	.9754
#3	.6500	42.96	1.304	4.649	.8643	.0016	2.274	.0373	.9830

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0008**	**.0025**	**1.043**	**.0269**	**2.858**	**.5413**	**-.0069**	**.0558**	**1.542**
Stddev	.0005	.0004	.002	.0003	.047	.0013	.0027	.0001	.001
%RSD	63.66	17.74	.1515	1.296	1.650	.2422	39.02	.1176	.0843
#1	-.0012	.0024	1.042	.0268	2.886	.5402	-.0097	.0557	1.541
#2	-.0009	.0021	1.043	.0265	2.886	.5410	-.0044	.0558	1.544
#3	-.0002	.0030	1.045	.0272	2.804	.5428	-.0064	.0558	1.541

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2108.2**	**11691.**	**91463.**	**8268.0**
Stddev	4.8	16.	255.	47.1
%RSD	.22973	.13742	.27908	.56977
#1	2107.1	11693.	91491.	8213.6
#2	2113.6	11674.	91704.	8294.1
#3	2104.1	11706.	91196.	8296.2

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: FA34066-10 Acquired: 5/20/2016 17:10:18 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0007**	**137.2**	**.0161**	**1.484**	**.0046**	**44.86**	**.0010**	**.0042**	**.1354**
Stddev	.0000	.3	.0002	.003	.0000	.18	.0000	.0001	.0004
%RSD	4.139	.2057	1.415	.2224	.9330	.3933	3.197	1.491	.3074
#1	-.0007	137.5	.0163	1.487	.0046	45.04	.0010	.0042	.1358
#2	-.0006	136.9	.0162	1.481	.0045	44.69	.0010	.0041	.1352
#3	-.0007	137.3	.0159	1.486	.0045	44.87	.0010	.0043	.1351

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0064**	**36.82**	**1.051**	**3.319**	**.2927**	**.0008**	**2.425**	**.0340**	**.2067**
Stddev	.0001	.10	.008	.009	.0006	.0001	.004	.0001	.0011
%RSD	2.200	.2593	.7311	.2628	.2168	13.78	.1608	.2540	.5292
#1	.0064	36.91	1.050	3.327	.2928	.0009	2.421	.0340	.2065
#2	.0062	36.72	1.059	3.321	.2932	.0009	2.428	.0341	.2057
#3	.0065	36.83	1.044	3.310	.2920	.0007	2.427	.0339	.2079

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0014**	**.0023**	**.7610**	**.0094**	**2.588**	**.5251**	**-.0094**	**.0486**	**.0626**
Stddev	.0002	.0006	.0014	.0001	.029	.0007	.0018	.0001	.0000
%RSD	13.82	27.04	.1868	.8568	1.103	.1382	19.60	.2033	.0578
#1	-.0016	.0024	.7597	.0094	2.559	.5246	-.0073	.0485	.0626
#2	-.0012	.0017	.7625	.0094	2.588	.5259	-.0108	.0486	.0626
#3	-.0015	.0029	.7607	.0093	2.617	.5247	-.0101	.0487	.0627

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2274.0**	**11395.**	**90705.**	**8056.1**
Stddev	3.3	17.	242.	44.2
%RSD	.14361	.14694	.26695	.54925
#1	2276.1	11385.	90673.	8024.5
#2	2275.6	11385.	90480.	8106.7
#3	2270.2	11414.	90961.	8037.1

Zoom In Zoom Out

Sample Name: FA34066-11 Acquired: 5/20/2016 17:14:45 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0006**	**150.6**	**.0181**	**1.509**	**.0048**	**24.76**	**.0009**	**.0063**	**.1439**
Stddev	.0002	.2	.0001	.004	.0001	.04	.0000	.0001	.0002
%RSD	23.98	.1205	.4151	.2629	1.443	.1770	3.526	1.358	.1620
#1	-.0006	150.7	.0181	1.514	.0048	24.73	.0009	.0062	.1438
#2	-.0005	150.8	.0182	1.507	.0049	24.81	.0009	.0063	.1437
#3	-.0008	150.4	.0180	1.507	.0048	24.74	.0009	.0063	.1441

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0054**	**45.76**	**1.061**	**3.947**	**.3182**	**.0006**	**1.983**	**.0421**	**.1936**
Stddev	.0001	.17	.022	.008	.0009	.0001	.009	.0001	.0011
%RSD	1.455	.3749	2.085	.1945	.2781	16.08	.4407	.3440	.5752
#1	.0053	45.73	1.086	3.956	.3182	.0006	1.983	.0420	.1947
#2	.0053	45.95	1.047	3.943	.3173	.0006	1.992	.0422	.1925
#3	.0054	45.61	1.049	3.942	.3191	.0008	1.974	.0421	.1935

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0028**	**.0014**	**.8136**	**.0098**	**2.590**	**.6932**	**-.0094**	**.0539**	**.0475**
Stddev	.0003	.0004	.0032	.0002	.017	.0012	.0002	.0001	.0001
%RSD	12.37	27.55	.3927	1.981	.6475	.1767	2.168	.2705	.1546
#1	-.0025	.0014	.8136	.0098	2.582	.6932	-.0095	.0541	.0475
#2	-.0032	.0010	.8168	.0100	2.579	.6919	-.0092	.0540	.0475
#3	-.0028	.0017	.8104	.0097	2.609	.6944	-.0096	.0538	.0476

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2297.1**	**11205.**	**88481.**	**7989.2**
Stddev	12.5	29.	375.	18.0
%RSD	.54548	.25945	.42385	.22584
#1	2282.6	11187.	88463.	8010.0
#2	2304.4	11188.	88865.	7976.9
#3	2304.2	11238.	88115.	7980.9

Zoom In Zoom Out

Sample Name: FA34066-12 Acquired: 5/20/2016 17:19:13 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0006**	**145.5**	**.0170**	**1.394**	**.0039**	**93.14**	**.0012**	**.0049**	**.1343**
Stddev	.0001	.3	.0004	.004	.0000	.19	.0000	.0000	.0004
%RSD	12.07	.2311	2.195	.2845	.7701	.2081	3.079	.9319	.2639
#1	-.0007	145.1	.0174	1.391	.0039	93.19	.0012	.0049	.1343
#2	-.0005	145.6	.0166	1.398	.0040	92.93	.0013	.0050	.1347
#3	-.0006	145.8	.0170	1.392	.0039	93.30	.0012	.0049	.1340

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0595**	**42.90**	**2.102**	**5.130**	**.4517**	**.0012**	**1.380**	**.0419**	**.5510**
Stddev	.0001	.04	.024	.012	.0007	.0001	.005	.0001	.0012
%RSD	.2294	.0821	1.119	.2306	.1511	5.146	.3987	.2206	.2176
#1	.0594	42.89	2.119	5.132	.4510	.0012	1.375	.0420	.5521
#2	.0594	42.87	2.075	5.118	.4524	.0011	1.386	.0419	.5512
#3	.0596	42.94	2.112	5.141	.4516	.0012	1.378	.0419	.5497

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0007**	**.0032**	**1.271**	**.0444**	**2.436**	**.7234**	**-.0069**	**.0508**	**.3178**
Stddev	.0003	.0017	.004	.0005	.009	.0011	.0006	.0001	.0011
%RSD	38.38	53.54	.3245	1.141	.3549	.1483	8.014	.2524	.3405
#1	-.0005	.0047	1.276	.0447	2.428	.7223	-.0072	.0508	.3189
#2	-.0011	.0013	1.269	.0438	2.445	.7244	-.0063	.0510	.3177
#3	-.0007	.0036	1.268	.0447	2.434	.7235	-.0073	.0507	.3168

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2256.1**	**8431.0**	**66872.**	**5999.1**
Stddev	2.7	12.7	85.	38.7
%RSD	.12042	.15071	.12682	.64471
#1	2255.7	8416.9	66954.	5992.6
#2	2253.7	8441.5	66784.	6040.6
#3	2259.1	8434.7	66879.	5964.0

Zoom In Zoom Out

Sample Name: FA34066-13 Acquired: 5/20/2016 17:23:37 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0005**	**126.9**	**.0149**	**1.153**	**.0034**	**31.06**	**.0002**	**.0045**	**.1179**
Stddev	.0000	.1	.0002	.001	.0001	.06	.0000	.0001	.0000
%RSD	9.274	.0503	1.031	.0599	1.692	.1853	14.33	1.559	.0346
#1	-.0006	127.0	.0149	1.154	.0035	31.08	.0002	.0046	.1179
#2	-.0005	127.0	.0147	1.153	.0034	31.00	.0002	.0044	.1179
#3	-.0005	126.9	.0150	1.153	.0034	31.11	.0002	.0045	.1180

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0099**	**37.60**	**1.421**	**3.759**	**.2541**	**.0014**	**1.063**	**.0364**	**.1237**
Stddev	.0001	.06	.008	.017	.0007	.0001	.001	.0001	.0006
%RSD	1.302	.1717	.5609	.4492	.2734	4.162	.0485	.1753	.4523
#1	.0100	37.55	1.426	3.744	.2543	.0014	1.064	.0363	.1243
#2	.0098	37.67	1.411	3.755	.2546	.0013	1.063	.0364	.1231
#3	.0099	37.58	1.424	3.777	.2533	.0014	1.064	.0364	.1237

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0017**	**.0029**	**1.009**	**.0125**	**2.158**	**.6524**	**-.0058**	**.0469**	**.0502**
Stddev	.0000	.0005	.001	.0001	.002	.0005	.0020	.0002	.0002
%RSD	1.892	15.84	.0736	.5236	.1063	.0840	33.78	.4315	.4390
#1	-.0017	.0024	1.009	.0124	2.156	.6529	-.0074	.0469	.0501
#2	-.0018	.0033	1.009	.0125	2.160	.6526	-.0036	.0471	.0500
#3	-.0017	.0029	1.010	.0124	2.159	.6518	-.0065	.0467	.0505

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2374.3**	**8199.0**	**64646.**	**5742.1**
Stddev	3.0	8.8	155.	20.6
%RSD	.12505	.10750	.23953	.35881
#1	2373.4	8204.7	64500.	5765.3
#2	2371.9	8188.8	64628.	5726.0
#3	2377.6	8203.5	64809.	5734.8

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: FA34066-14 Acquired: 5/20/2016 17:27:57 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0031**	**238.2**	**.0280**	**2.280**	**.0064**	**181.2**	**.0018**	**.0094**	**.2321**
Stddev	.0012	.3	.0003	.007	.0003	.2	.0001	.0001	.0018
%RSD	38.91	.1186	.9749	.2942	4.646	.0860	6.635	1.409	.7644
#1	-.0037	238.5	.0281	2.287	.0067	181.4	.0020	.0094	.2335
#2	-.0017	238.1	.0277	2.276	.0061	181.2	.0017	.0095	.2328
#3	-.0038	237.9	.0282	2.275	.0064	181.1	.0018	.0093	.2301

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.1089**	**73.80**	**3.493**	**8.930**	**.7386**	**.0014**	**2.358**	**.0729**	**.5349**
Stddev	.0005	.14	.193	.091	.0007	.0001	.015	.0002	.0024
%RSD	.4214	.1914	5.534	1.021	.0898	7.638	.6535	.3240	.4556
#1	.1093	73.81	3.639	8.887	.7379	.0015	2.348	.0731	.5361
#2	.1090	73.93	3.567	9.035	.7392	.0015	2.376	.0728	.5321
#3	.1084	73.65	3.274	8.869	.7386	.0013	2.352	.0727	.5365

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0026**	**.0098**	**2.428**	**.0859**	**4.027**	**1.290**	**-.0035**	**.0878**	**.6254**
Stddev	.0024	.0071	.014	.0017	.008	.002	.0021	.0003	.0001
%RSD	92.20	71.97	.5940	1.985	.2018	.1852	61.34	.3281	.0196
#1	.0052	.0028	2.420	.0846	4.034	1.292	-.0054	.0875	.6253
#2	.0019	.0096	2.419	.0852	4.018	1.290	-.0039	.0880	.6255
#3	.0006	.0169	2.445	.0878	4.029	1.287	-.0012	.0878	.6254

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2450.0**	**5752.2**	**45481.**	**4012.5**
Stddev	3.7	23.7	34.	18.2
%RSD	.15214	.41128	.07520	.45481
#1	2454.1	5769.1	45511.	4029.4
#2	2448.8	5762.3	45487.	3993.1
#3	2447.0	5725.1	45444.	4015.1

Zoom In Zoom Out

Sample Name: FA34062-1 Acquired: 5/20/2016 17:32:20 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0005**	**130.7**	**.0160**	**1.106**	**.0034**	**61.83**	**.0004**	**.0042**	**.1164**
Stddev	.0001	.3	.0009	.005	.0000	.23	.0000	.0000	.0003
%RSD	11.13	.2643	5.733	.4379	.2829	.3655	4.738	1.170	.2710
#1	-.0005	131.1	.0150	1.111	.0034	62.08	.0004	.0042	.1167
#2	-.0006	130.4	.0163	1.101	.0035	61.64	.0004	.0043	.1161
#3	-.0005	130.5	.0168	1.106	.0034	61.76	.0004	.0042	.1163

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0134**	**37.72**	**1.239**	**4.425**	**.3919**	**.0010**	**.8177**	**.0392**	**.1268**
Stddev	.0002	.06	.020	.046	.0010	.0001	.0006	.0002	.0006
%RSD	1.212	.1538	1.616	1.044	.2626	7.748	.0673	.5820	.4759
#1	.0134	37.78	1.251	4.444	.3929	.0011	.8182	.0393	.1262
#2	.0132	37.68	1.216	4.459	.3908	.0009	.8171	.0393	.1270
#3	.0135	37.69	1.249	4.373	.3921	.0010	.8179	.0389	.1273

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0005**	**.0020**	**1.690**	**.0149**	**1.981**	**.7337**	**-.0047**	**.0497**	**.0775**
Stddev	.0017	.0018	.002	.0002	.007	.0015	.0016	.0001	.0002
%RSD	334.9	93.03	.1141	1.353	.3604	.2023	33.72	.1680	.3187
#1	.0016	.0034	1.692	.0148	1.988	.7349	-.0036	.0497	.0772
#2	-.0014	.0027	1.690	.0151	1.974	.7321	-.0039	.0497	.0775
#3	.0014	-.0001	1.688	.0147	1.982	.7342	-.0065	.0496	.0777

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2294.5**	**7684.6**	**61574.**	**5578.8**
Stddev	3.9	16.4	159.	21.6
%RSD	.17185	.21289	.25800	.38754
#1	2290.5	7665.7	61635.	5554.6
#2	2298.3	7694.2	61692.	5596.2
#3	2294.9	7693.8	61393.	5585.5

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/20/2016 17:36:40 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0089**	**.2476**	**.0102**	**.2116**	**.0052**	**1.107**	**.0052**	**.0534**	**.0106**
Stddev	.0001	.0008	.0006	.0018	.0001	.003	.0000	.0000	.0001
%RSD	1.579	.3378	5.687	.8624	1.957	.2849	.4119	.0774	1.068
#1	.0089	.2467	.0105	.2131	.0053	1.110	.0052	.0534	.0104
#2	.0087	.2477	.0106	.2095	.0051	1.105	.0052	.0535	.0107
#3	.0090	.2483	.0096	.2122	.0051	1.105	.0052	.0534	.0106

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0271**	**.3258**	**10.63**	**5.394**	**.0163**	**.0487**	**10.20**	**.0421**	**.0051**
Stddev	.0006	.0039	.11	.046	.0001	.0001	.05	.0001	.0004
%RSD	2.122	1.194	1.030	.8580	.8893	.1951	.4922	.1611	7.448
#1	.0278	.3282	10.64	5.399	.0161	.0486	10.25	.0420	.0055
#2	.0269	.3278	10.52	5.346	.0164	.0487	10.15	.0421	.0048
#3	.0267	.3213	10.74	5.438	.0163	.0488	10.21	.0421	.0051

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0052**	**.0108**	**.0853**	**.0528**	**.0110**	**.0104**	**.0116**	**.0482**	**.0220**
Stddev	.0009	.0008	.0004	.0003	.0001	.0001	.0013	.0002	.0001
%RSD	16.66	7.250	.4887	.6346	1.284	.9701	11.53	.3270	.4837
#1	.0050	.0108	.0856	.0524	.0110	.0104	.0105	.0481	.0221
#2	.0045	.0101	.0854	.0528	.0108	.0105	.0131	.0484	.0220
#3	.0062	.0116	.0848	.0531	.0111	.0103	.0111	.0482	.0219

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2565.2**	**4957.5**	**39366.**	**3541.9**
Stddev	7.6	9.9	224.	22.1
%RSD	.29782	.19995	.56808	.62310
#1	2565.3	4956.8	39465.	3551.2
#2	2572.8	4967.7	39110.	3557.7
#3	2557.5	4947.9	39523.	3516.7

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/20/2016 17:41:07 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	**-.0001**	F **509.0**	**.0022**	**-.0001**	**.0000**	**494.1**	**.0000**	**-.0001**
Stddev	.0006	2.5	.0013	.0001	.000	3.7	.000	.0000
%RSD	932.1	.4959	60.30	241.4	66.93	.7563	254.6	65.92
#1	.0000	507.1	.0033	.0001	.0000	490.5	-.0001	.0000
#2	.0005	508.1	.0007	.0000	-.0001	497.9	-.0001	-.0001
#3	-.0007	511.9	.0025	-.0002	.0000	493.9	.0001	-.0001

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	**-.0005**	**.0000**	**181.0**	**.0549**	F **535.5**	**-.0003**	**.0011**	**.1485**
Stddev	.0001	.0004	.1	.0167	.5	.0000	.0002	.0094
%RSD	10.00	6174.	.0452	30.46	.0969	9.268	19.42	6.330
#1	-.0005	.0002	181.0	.0402	535.5	-.0003	.0010	.1586
#2	-.0005	-.0004	181.0	.0731	535.0	-.0003	.0013	.1469
#3	-.0006	.0003	181.1	.0513	536.0	-.0004	.0009	.1400

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	**.0004**	F **-.0084**	**.0010**	**.0035**	**.0115**	**.0021**	**.0003**	**.0009**
Stddev	.0001	.0016	.0036	.0043	.0009	.0002	.0001	.0002
%RSD	19.65	18.97	348.1	123.7	7.978	10.19	24.51	19.36
#1	.0004	-.0067	.0042	.0065	.0108	.0023	.0002	.0007
#2	.0005	-.0084	.0018	-.0015	.0111	.0020	.0002	.0008
#3	.0004	-.0099	-.0029	.0054	.0125	.0020	.0004	.0011

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0010**	**.0001**	**-.0019**
Stddev	.0001	.0001	.0003
%RSD	9.186	123.9	13.93
#1	-.0010	.0000	-.0022
#2	-.0009	.0002	-.0018
#3	-.0011	.0000	-.0018

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/20/2016 17:41:07 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**2009.0**	**4439.2**	**34472.**	**3292.6**
Stddev	3.1	7.4	69.	6.3
%RSD	.15340	.16729	.20012	.19253
#1	2011.4	4443.0	34429.	3299.4
#2	2010.0	4444.1	34436.	3286.9
#3	2005.5	4430.7	34552.	3291.6

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/20/2016 17:45:46 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2501**	**41.48**	**1.934**	**2.063**	**2.020**	**42.23**	**1.970**	**1.990**	**2.014**
Stddev	.0012	.37	.016	.016	.017	.43	.014	.015	.009
%RSD	.4991	.8958	.8169	.7659	.8418	1.021	.7133	.7395	.4652
#1	.2502	41.51	1.939	2.062	2.021	42.15	1.978	1.998	2.018
#2	.2514	41.83	1.947	2.079	2.036	42.69	1.979	2.000	2.021
#3	.2489	41.09	1.916	2.048	2.002	41.84	1.954	1.973	2.004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.021**	**42.29**	**41.86**	**42.17**	**2.002**	**2.000**	**40.02**	**1.950**	**1.950**
Stddev	.021	.39	.33	.30	.009	.014	.28	.015	.011
%RSD	1.055	.9316	.7786	.7233	.4577	.6989	.7116	.7416	.5576
#1	2.029	42.28	41.80	42.18	2.008	2.008	40.01	1.958	1.957
#2	2.036	42.68	42.21	42.47	2.006	2.008	40.30	1.959	1.956
#3	1.996	41.89	41.56	41.86	1.991	1.984	39.73	1.934	1.938
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.944**	**1.957**	**2.016**	**2.035**	**2.111**	**1.986**	**1.962**	**1.963**	**2.027**
Stddev	.016	.014	.015	.016	.017	.013	.014	.010	.014
%RSD	.8196	.7033	.7208	.7823	.7994	.6688	.6886	.5164	.6945
#1	1.958	1.967	2.025	2.040	2.108	1.992	1.971	1.968	2.033
#2	1.948	1.963	2.024	2.047	2.130	1.995	1.968	1.970	2.038
#3	1.927	1.941	1.999	2.017	2.096	1.970	1.946	1.952	2.011
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/20/2016 17:45:46 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2252.0**	**4737.8**	**37793.**	**3401.8**
Stddev	10.6	26.7	103.	34.0
%RSD	.47064	.56328	.27339	1.0002
#1	2242.4	4715.8	37707.	3410.7
#2	2250.3	4730.0	37763.	3364.2
#3	2263.4	4767.5	37907.	3430.4

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/20/2016 17:49:58 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0002**	**.0167**	**.0004**	**.0005**	**.0002**	**.0274**	**.0001**	**.0002**	**.0004**
Stddev	.0002	.0030	.0003	.0002	.0001	.0022	.0000	.0001	.0001
%RSD	72.59	18.29	80.02	40.02	24.85	8.209	29.58	57.48	30.95
#1	-.0003	.0186	.0005	.0006	.0003	.0288	.0001	.0002	.0005
#2	.0000	.0132	.0000	.0003	.0003	.0285	.0001	.0002	.0005
#3	-.0004	.0182	.0006	.0006	.0002	.0248	.0001	.0001	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**.0234**	**.0037**	**.0319**	**.0003**	F **.0014**	**-.0012**	**.0001**	**.0004**
Stddev	.0003	.0054	.0430	.0064	.0000	.0004	.0113	.0001	.0005
%RSD	238.0	22.86	1166.	20.22	7.440	28.78	914.7	112.8	119.6
#1	.0002	.0279	.0213	.0389	.0003	.0018	.0115	.0001	.0008
#2	-.0003	.0248	-.0453	.0305	.0003	.0011	-.0101	.0000	.0007
#3	-.0002	.0175	.0351	.0262	.0003	.0011	-.0051	.0003	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.0029**	**.0014**	**.0024**	**.0000**	**.0004**	**.0007**	**.0007**	**.0002**	**.0008**
Stddev	.0003	.0006	.0002	.000	.0001	.0001	.0007	.0001	.0001
%RSD	11.88	42.53	9.386	186.4	23.44	12.87	101.4	31.35	6.597
#1	.0026	.0016	.0021	.0000	.0004	.0008	.0000	.0003	.0008
#2	.0033	.0008	.0025	.0000	.0005	.0007	.0014	.0002	.0008
#3	.0029	.0020	.0026	-.0001	.0003	.0006	.0006	.0002	.0009
Check ?	Chk Fail	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.0020								
Low Limit	-.0020								

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/20/2016 17:49:58 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2642.2**	**4973.1**	**39571.**	**3468.2**
Stddev	4.3	2.5	237.	30.3
%RSD	.16228	.05108	.60003	.87385
#1	2642.2	4975.3	39788.	3435.3
#2	2646.4	4973.8	39318.	3474.3
#3	2637.9	4970.3	39608.	3495.0

Zoom In Zoom Out

Sample Name: ICASB Acquired: 5/20/2016 17:54:32 Type: Unk
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	F **1.035**	**499.6**	**1.048**	**.5377**	**.5113**	**491.2**	**.9354**	**.4708**	**.5084**
Stddev	.003	6.9	.002	.0018	.0006	4.8	.0022	.0006	.0003
%RSD	.2933	1.378	.1578	.3385	.1158	.9687	.2317	.1298	.0578
#1	1.037	506.2	1.046	.5391	.5113	492.4	.9330	.4703	.5087
#2	1.032	492.5	1.048	.5356	.5107	486.0	.9360	.4707	.5082
#3	1.036	500.2	1.049	.5384	.5119	495.3	.9372	.4715	.5081

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.5504**	**183.0**	**.0215**	F **533.8**	**.4959**	**.9047**	**.1444**	**.9263**	**.9382**
Stddev	.0004	1.0	.0403	3.3	.0020	.0017	.0020	.0029	.0036
%RSD	.0766	.5437	187.2	.6138	.3950	.1914	1.372	.3092	.3800
#1	.5500	183.8	.0663	536.4	.4964	.9030	.1465	.9230	.9341
#2	.5505	181.9	.0099	530.1	.4977	.9046	.1425	.9274	.9396
#3	.5509	183.4	-.0117	534.9	.4938	.9064	.1442	.9284	.9408

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.9836**	**.9911**	**.0751**	**.9005**	**1.037**	**.9556**	**.9129**	**.4537**	**.9563**
Stddev	.0047	.0021	.0006	.0011	.005	.0022	.0082	.0010	.0014
%RSD	.4824	.2164	.8281	.1216	.5162	.2332	.9012	.2311	.1436
#1	.9809	.9895	.0752	.8997	1.039	.9558	.9060	.4549	.9549
#2	.9809	.9902	.0756	.9017	1.031	.9577	.9107	.4534	.9577
#3	.9891	.9935	.0744	.8999	1.041	.9533	.9220	.4529	.9564

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1979.7**	**4384.8**	**34378.**	**3284.4**
Stddev	2.0	2.8	148.	33.6
%RSD	.10159	.06468	.43042	1.0242
#1	1980.3	4383.2	34369.	3262.9
#2	1981.4	4388.1	34234.	3323.1
#3	1977.5	4383.2	34530.	3267.1

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/20/2016 17:59:01 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2492**	**40.69**	**1.939**	**2.029**	**1.992**	**41.36**	**1.964**	**1.977**	**2.002**
Stddev	.0009	.07	.003	.005	.010	.15	.000	.003	.007
%RSD	.3414	.1663	.1714	.2420	.4980	.3511	.0085	.1243	.3382
#1	.2502	40.75	1.939	2.026	1.993	41.52	1.964	1.975	2.010
#2	.2490	40.62	1.942	2.026	1.982	41.23	1.964	1.978	1.998
#3	.2486	40.69	1.936	2.034	2.002	41.32	1.964	1.979	1.998
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.004**	**41.62**	**41.10**	**41.18**	**1.992**	**1.986**	**39.62**	**1.946**	**1.944**
Stddev	.004	.15	.06	.28	.007	.001	.12	.003	.005
%RSD	.2263	.3582	.1427	.6899	.3606	.0698	.3133	.1463	.2621
#1	2.008	41.68	41.14	41.48	1.999	1.984	39.63	1.945	1.949
#2	1.999	41.45	41.03	40.91	1.990	1.986	39.49	1.949	1.943
#3	2.004	41.73	41.13	41.15	1.985	1.987	39.74	1.943	1.939
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.940**	**1.956**	**2.010**	**2.013**	**2.067**	**1.984**	**1.953**	**1.969**	**2.008**
Stddev	.006	.004	.004	.003	.006	.006	.002	.005	.003
%RSD	.3375	.2273	.2208	.1272	.2858	.2906	.1149	.2548	.1677
#1	1.932	1.959	2.004	2.010	2.070	1.991	1.951	1.974	2.008
#2	1.943	1.958	2.012	2.013	2.061	1.983	1.955	1.967	2.004
#3	1.944	1.951	2.012	2.015	2.072	1.979	1.954	1.965	2.011
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/20/2016 17:59:01 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2263.9**	**4757.5**	**38004.**	**3467.7**
Stddev	.7	6.4	193.	29.9
%RSD	.03166	.13462	.50750	.86342
#1	2263.7	4764.9	37783.	3437.3
#2	2263.3	4754.2	38094.	3468.6
#3	2264.7	4753.5	38136.	3497.2

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/20/2016 18:03:13 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**.0190**	**.0004**	**.0005**	**.0002**	**.0259**	**.0001**	**.0002**	**.0003**
Stddev	.0002	.0125	.0008	.0003	.0001	.0053	.0000	.0001	.0003
%RSD	345.6	66.12	186.3	59.66	55.62	20.58	31.93	30.04	94.41
#1	.0002	.0324	.0009	.0008	.0002	.0279	.0001	.0003	.0006
#2	-.0001	.0076	-.0005	.0002	.0002	.0301	.0002	.0002	.0000
#3	.0000	.0169	.0009	.0005	.0001	.0199	.0001	.0002	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0002**	**.0216**	**-.0199**	**.0281**	**.0003**	F **.0016**	**.0041**	**.0001**	**.0007**
Stddev	.0002	.0057	.0078	.0237	.0000	.0003	.0043	.0002	.0002
%RSD	85.47	26.53	39.07	84.33	7.821	22.14	103.5	155.6	31.72
#1	-.0002	.0241	-.0226	.0328	.0003	.0019	.0042	.0003	.0009
#2	.0000	.0256	-.0111	.0492	.0003	.0016	-.0002	-.0001	.0005
#3	-.0004	.0150	-.0259	.0024	.0002	.0012	.0084	.0001	.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0019**	**.0012**	**.0020**	**.0003**	**.0003**	**.0008**	**.0010**	**.0002**	**.0008**
Stddev	.0008	.0007	.0002	.0003	.0000	.0001	.0008	.0001	.0000
%RSD	43.28	58.54	9.583	93.70	11.73	7.772	77.66	54.31	4.790
#1	.0028	.0020	.0022	.0002	.0003	.0008	.0018	.0001	.0009
#2	.0011	.0008	.0018	.0001	.0003	.0009	.0002	.0003	.0008
#3	.0018	.0009	.0021	.0006	.0002	.0008	.0011	.0001	.0008
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/20/2016 18:03:13 Type: QC
Method: 60102007_042011(v121) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2669.6**	**5020.5**	**40264.**	**3560.1**
Stddev	4.5	13.8	131.	10.9
%RSD	.16832	.27423	.32601	.30711
#1	2668.9	5028.9	40223.	3559.1
#2	2674.4	5028.1	40411.	3549.7
#3	2665.5	5004.6	40159.	3571.5

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Ag 328.068 {103}	☒	2	V	-0.005817	0.000000	No
			Fe	0.000003	0.000000	No
Al 396.152 { 85}	☒	1	Mo	0.040330	0.000000	No
As 189.042 {478}	☒	4	Fe	-0.000077	0.000000	No
			Cr	-0.000653	0.000000	No
			Mo	0.000444	0.000000	No
			Al	0.000001	0.000000	No
Ba 455.403 { 74}	☒	1	Fe	0.000008	0.000000	No
Be 313.042 {108}	☒	2	V	0.000625	0.000000	No
			Ti	-0.000289	0.000000	No
Ca 317.933 {106}	☒	None				
Cd 226.502 {449}	☒	4	Fe	0.000089	0.000000	No
			Ca	-0.000000	0.000000	No
			Al	-0.000002	0.000000	No
			Ti	0.000103	0.000000	No
Co 228.616 {447}	☒	3	Mo	-0.001220	0.000000	No
			Ti	0.002210	0.000000	No
			Fe	0.000000	0.000000	No
Cr 267.716 {126}	☒	4	Al	0.000005	0.000000	No
			Fe	-0.000014	0.000000	No
			Ca	0.000002	0.000000	No
			Cd	-0.000120	0.000000	No
Cu 324.754 {104}	☒	10	Mo	0.000189	0.000000	No
			Sn	-0.000012	0.000000	No
			V	-0.000158	0.000000	No
			Al	0.000003	0.000000	No
			Mg	0.000003	0.000000	No
			Co	-0.000547	0.000000	No
			Cd	0.000190	0.000000	No
			Fe	-0.000114	0.000000	No
			Ca	0.000001	0.000000	No
			Ti	-0.000268	0.000000	No
Fe 259.940 {130}	☒	None				
In 230.606 {446}*	☒	None				
K 766.490 { 44}	☒	None				
Mg 279.079 {121}	☒	None				
Mn 257.610 {131}	☒	2	Fe	0.000008	0.000000	No
			Mg	0.000000	0.000000	No
Mo 202.030 {467}	☒	1	Fe	-0.000010	0.000000	No
Na 589.592 { 57}	☒	None				
Ni 231.604 {445}	☒	7	Fe	-0.000041	0.000000	No
			Co	0.000112	0.000000	No
			Mo	0.000980	0.000000	No
			Sb	-0.000120	0.000000	No
			Al	0.000003	0.000000	No
			Be	-0.000304	0.000000	No
			Tl	0.000172	0.000000	No
Pb 220.353 {453}	☒	8	Al	0.000178	0.000000	No
			Fe	0.000090	0.000000	No
			Mo	-0.002189	0.000000	No
			Cu	0.000467	0.000000	No
			Ti	0.000036	0.000000	No
			Si	0.000232	0.000000	No
			Ca	-0.000005	0.000000	No
			Cr	-0.000260	0.000000	No
Sb 206.833 {463}	☒	11	Fe	0.000027	0.000000	No
			Cr	0.011486	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
			Mo	-0.003944	0.000000	No
			V	-0.000441	0.000000	No
			Sn	-0.008695	0.000000	No
			Ti	0.000278	0.000000	No
			Ca	0.000001	0.000000	No
			Ni	-0.000818	0.000000	No
			Al	0.000010	0.000000	No
			Mn	-0.000133	0.000000	No
			Mg	-0.000002	0.000000	No
Se 196.090 {472}	☒	12	Fe	0.000017	0.000000	No
			Ca	-0.000003	0.000000	No
			Mn	0.000331	0.000000	No
			Mo	0.000111	0.000000	No
			Al	-0.000035	0.000000	No
			V	0.000000	0.000000	No
			Zn	0.000000	0.000000	No
			Sr	-0.000111	0.000000	No
			As	0.000125	0.000000	No
			Cd	-0.000250	0.000000	No
			Mg	-0.000004	0.000000	No
			Cr	-0.000326	0.000000	No
Si 212.412 {459}	☒	1	Mo	0.000000	0.000000	No
Sn 189.989 {477}	☒	None				
Sr 407.771 { 83}	☒	1	Ca	0.000013	0.000000	No
Ti 334.941 {101}	☒	1	Ca	-0.000011	0.000000	No
Tl 190.856 {477}	☒	10	Co	0.004099	0.000000	No
			Fe	-0.000003	0.000000	No
			Al	-0.000005	0.000000	No
			Ba	-0.000051	0.000000	No
			Ti	-0.000648	0.000000	No
			Sb	0.000167	0.000000	No
			Ca	-0.000004	0.000000	No
			Cr	0.000340	0.000000	No
			Mg	-0.000002	0.000000	No
			V	0.000015	0.000000	No
V 292.402 {115}	☒	5	Fe	0.000013	0.000000	No
			Cr	-0.003634	0.000000	No
			Mo	-0.009536	0.000000	No
			Ti	0.000303	0.000000	No
			Mn	-0.000333	0.000000	No
Y 224.306 {450}*	☒	None				
Y 360.073 { 94}*	☒	None				
Y 371.030 { 91}*	☒	None				
Zn 206.200 {463}	☒	5	Cr	-0.001305	0.000000	No
			Al	0.000011	0.000000	No
			Ca	0.000003	0.000000	No
			Fe	-0.000010	0.000000	No
			As	0.001105	0.000000	No

Element, Wavelength and Order	Date of Fit	Date of Cal.	Type of Fit	Weighting	A0	A1	A2	n (Exponent)
Ag 328.068 {103}	5/20/2016 9:46:36	5/20/2016 9:09:35	Linear	1/Conc	-0.000220	0.608417	0.000000	1.000000
Al 396.152 { 85}	5/20/2016 9:46:36	5/20/2016 9:09:35	Linear	1/Conc	0.004283	0.237721	0.000000	1.000000
As 189.042 {478}	5/20/2016 9:46:36	5/20/2016 9:09:35	Linear	1/Conc	-0.000655	0.184809	0.000000	1.000000
Ba 455.403 { 74}	5/20/2016 9:46:36	5/20/2016 9:09:35	Linear	1/Conc	0.006881	9.556729	0.000000	1.000000
Be 313.042 {108}	5/20/2016 9:46:36	5/20/2016 9:09:35	Linear	1/Conc	0.004393	11.169899	0.000000	1.000000
Ca 317.933 {106}	5/20/2016 9:46:36	5/20/2016 9:09:35	Linear	1/Conc	0.007164	0.241489	0.000000	1.000000
Cd 226.502 {449}	5/20/2016 9:46:36	5/20/2016 9:09:35	Linear	1/Conc	-0.000897	4.656489	0.000000	1.000000
Co 228.616 {447}	5/20/2016 9:46:36	5/20/2016 9:09:35	Linear	1/Conc	-0.000385	2.618692	0.000000	1.000000
Cr 267.716 {126}	5/20/2016 9:46:36	5/20/2016 9:09:35	Linear	1/Conc	-0.000170	0.528661	0.000000	1.000000
Cu 324.754 {104}	5/20/2016 9:46:36	5/20/2016 9:09:35	Linear	1/Conc	0.006896	0.959678	0.000000	1.000000
Fe 259.940 {130}	5/20/2016 9:46:36	5/20/2016 9:09:35	Linear	1/Conc	0.003531	0.164146	0.000000	1.000000
In 230.606 {446}*	5/20/2016 9:46:36	5/5/2010 12:30:54	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
K 766.490 { 44}	5/20/2016 9:46:36	5/20/2016 9:09:35	Linear	1/Conc	-0.005949	0.105323	0.000000	1.000000
Mg 279.079 {121}	5/20/2016 9:46:36	5/20/2016 9:09:35	Linear	1/Conc	0.000455	0.025079	0.000000	1.000000
Mn 257.610 {131}	5/20/2016 9:46:36	5/20/2016 9:09:35	Linear	1/Conc	0.001024	2.906472	0.000000	1.000000
Mo 202.030 {467}	5/20/2016 9:46:36	5/20/2016 9:09:35	Linear	1/Conc	0.002367	1.185082	0.000000	1.000000
Na 589.592 { 57}	5/20/2016 9:46:36	5/20/2016 9:09:35	Linear	1/Conc	-0.016011	0.444340	0.000000	1.000000
Ni 231.604 {445}	5/20/2016 9:46:36	5/20/2016 9:09:35	Linear	1/Conc	-0.000526	1.535835	0.000000	1.000000
Pb 220.353 {453}	5/20/2016 9:46:36	5/20/2016 9:09:35	Linear	1/Conc	0.000460	0.819982	0.000000	1.000000
Sb 206.833 {463}	5/20/2016 9:46:36	5/20/2016 9:09:35	Linear	1/Conc	0.001059	0.263992	0.000000	1.000000
Se 196.090 {472}	5/20/2016 9:46:36	5/20/2016 9:09:35	Linear	1/Conc	-0.000138	0.133998	0.000000	1.000000
Si 212.412 {459}	5/20/2016 9:46:36	5/20/2016 9:09:35	Linear	1/Conc	0.004811	0.424106	0.000000	1.000000
Sn 189.989 {477}	5/20/2016 9:46:36	5/20/2016 9:09:35	Linear	1/Conc	0.000624	0.410342	0.000000	1.000000
Sr 407.771 { 83}	5/20/2016 9:46:36	5/20/2016 9:09:35	Linear	1/Conc	0.007339	17.006982	0.000000	1.000000
Ti 334.941 {101}	5/20/2016 9:46:36	5/20/2016 9:09:35	Linear	1/Conc	0.003063	2.084502	0.000000	1.000000
Tl 190.856 {477}	5/20/2016 9:46:36	5/20/2016 9:09:35	Linear	1/Conc	-0.001462	0.298894	0.000000	1.000000
V 292.402 {115}	5/20/2016 9:46:36	5/20/2016 9:09:35	Linear	1/Conc	-0.000668	0.722891	0.000000	1.000000
Y 224.306 {450}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 360.073 { 94}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 371.030 { 91}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Zn 206.200 {463}	5/20/2016 9:46:36	5/20/2016 9:09:35	Linear	1/Conc	0.000564	2.293494	0.000000	1.000000

	Element, Wavelength and Order	Correlation	Std Error of Est	Predicted MDL	Predicted MQL	Status	Reslope		QC Norm	
							Slope	Y-int	Slope factor	Offset
	Ag 328.068 {103}	0.999998	0.000011	0.000344	0.001146	OK.	1.000000	0.000000	1	0
	Al 396.152 { 85}	0.999829	0.007089	0.008112	0.027039	OK.	1.000000	0.000000	1	0
	As 189.042 {478}	0.999911	0.000199	0.000808	0.002695	OK.	1.000000	0.000000	1	0
	Ba 455.403 { 74}	0.999949	0.007751	0.000258	0.000859	OK.	1.000000	0.000000	1	0
	Be 313.042 {108}	0.999956	0.008451	0.000070	0.000232	OK.	1.000000	0.000000	1	0
	Ca 317.933 {106}	0.999867	0.006351	0.003669	0.012230	OK.	1.000000	0.000000	1	0
	Cd 226.502 {449}	0.999941	0.004083	0.000049	0.000164	OK.	1.000000	0.000000	1	0
	Co 228.616 {447}	0.999960	0.001899	0.000098	0.000325	OK.	1.000000	0.000000	1	0
	Cr 267.716 {126}	0.999928	0.000512	0.000249	0.000830	OK.	1.000000	0.000000	1	0
	Cu 324.754 {104}	0.999983	0.000452	0.000203	0.000678	OK.	1.000000	0.000000	1	0
	Fe 259.940 {130}	0.999359	0.009473	0.002777	0.009257	OK.	1.000000	0.000000	1	0
	In 230.606 {446}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	K 766.490 { 44}	0.999813	0.003285	0.032193	0.107311	OK.	1.000000	0.000000	1	0
	Mg 279.079 {121}	0.999845	0.000711	0.023184	0.077279	OK.	1.000000	0.000000	1	0
	Mn 257.610 {131}	0.999749	0.005245	0.000040	0.000134	OK.	1.000000	0.000000	1	0
	Mo 202.030 {467}	0.999962	0.000834	0.000127	0.000424	OK.	1.000000	0.000000	1	0
	Na 589.592 { 57}	0.999819	0.013610	0.007979	0.026596	OK.	1.000000	0.000000	1	0
	Ni 231.604 {445}	0.999928	0.001486	0.000170	0.000566	OK.	1.000000	0.000000	1	0
	Pb 220.353 {453}	0.999861	0.001105	0.000599	0.001998	OK.	1.000000	0.000000	1	0
	Sb 206.833 {463}	0.999954	0.000203	0.000900	0.002999	OK.	1.000000	0.000000	1	0
	Se 196.090 {472}	0.999934	0.000124	0.001619	0.005398	OK.	1.000000	0.000000	1	0
	Si 212.412 {459}	0.999655	0.000898	0.000395	0.001317	OK.	1.000000	0.000000	1	0
	Sn 189.989 {477}	0.999849	0.000574	0.000308	0.001026	OK.	1.000000	0.000000	1	0
	Sr 407.771 { 83}	0.999878	0.021421	0.000091	0.000303	OK.	1.000000	0.000000	1	0
	Ti 334.941 {101}	0.999802	0.003345	0.000096	0.000319	OK.	1.000000	0.000000	1	0
	Tl 190.856 {477}	0.999974	0.000174	0.000987	0.003289	OK.	1.000000	0.000000	1	0
	V 292.402 {115}	0.999936	0.000651	0.000231	0.000771	OK.	1.000000	0.000000	1	0
	Y 224.306 {450}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Y 360.073 { 94}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Y 371.030 { 91}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Zn 206.200 {463}	0.999965	0.001535	0.000076	0.000252	OK.	1.000000	0.000000	1	0

Zoom In ▶ Zoom Out

Sample Name: Blank Acquired: 5/23/2016 8:52:27 Type: Cal
Method: 60102007_041712(v134) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.0011	-.0121	-.0003	.0145	-.0001	.0043	-.0003	.0003	.0001
Stddev	.0001	.0019	.0001	.0012	.0004	.0002	.0001	.0002	.0001
%RSD	4.946	15.97	46.44	7.964	368.4	4.734	25.48	60.31	94.50
#1	-.0011	-.0100	-.0004	.0151	-.0003	.0045	-.0003	.0005	.0000
#2	-.0012	-.0137	-.0002	.0132	.0003	.0041	-.0002	.0003	.0002
#3	-.0011	-.0126	-.0003	.0153	-.0003	.0044	-.0002	.0001	.0001

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0048	.0014	-.0102	-.0004	.0003	.0007	-.0051	.0005	-.0011
Stddev	.0002	.0002	.0049	.0003	.0001	.0001	.0031	.0003	.0004
%RSD	3.414	13.06	48.55	89.24	46.93	12.11	61.64	60.24	40.03
#1	.0047	.0015	-.0066	-.0002	.0002	.0006	-.0015	.0003	-.0012
#2	.0050	.0014	-.0082	-.0007	.0002	.0006	-.0069	.0008	-.0015
#3	.0048	.0012	-.0158	-.0001	.0004	.0008	-.0069	.0003	-.0006

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0006	.0002	.0060	.0002	.0039	.0009	-.0038	-.0003	.0018
Stddev	.0002	.0001	.0001	.0001	.0013	.0001	.0004	.0000	.0001
%RSD	26.42	59.19	2.302	34.10	32.40	17.18	10.86	13.81	3.040
#1	.0007	.0001	.0059	.0001	.0049	.0010	-.0041	-.0003	.0018
#2	.0004	.0003	.0061	.0001	.0044	.0008	-.0033	-.0003	.0018
#3	.0007	.0002	.0060	.0002	.0025	.0008	-.0039	-.0002	.0019

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2701.7	6119.7	50837.	4523.7
Stddev	3.0	2.3	179.	28.5
%RSD	.11045	.03826	.35206	.63010
#1	2698.2	6122.3	50635.	4490.9
#2	2703.3	6117.7	50901.	4542.7
#3	2703.4	6119.1	50975.	4537.4

Zoom In ▶ Zoom Out

Sample Name: LowStd Acquired: 5/23/2016 8:55:53 Type: Cal
Method: 60102007_041712(v134) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0346	1.789	.1220	7.512	4.333	2.723	2.756	1.334	.2136	.3504
Stddev	.0004	.003	.0002	.029	.017	.005	.002	.000	.0010	.0007
%RSD	1.041	.1522	.1501	.3876	.3894	.1862	.0574	.0097	.4593	.1983
#1	.0343	1.786	.1218	7.479	4.314	2.717	2.755	1.333	.2125	.3500
#2	.0350	1.791	.1220	7.533	4.341	2.724	2.758	1.334	.2142	.3501
#3	.0346	1.789	.1222	7.523	4.345	2.727	2.755	1.334	.2142	.3512

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.783	1.534	.2586	1.487	.7301	4.324	.8819	.6224	.1360	.0868
Stddev	.005	.010	.0012	.004	.0004	.010	.0009	.0009	.0008	.0003
%RSD	.2734	.6278	.4490	.2847	.0571	.2302	.0999	.1372	.5676	.3108
#1	1.778	1.528	.2586	1.483	.7296	4.313	.8827	.6218	.1364	.0867
#2	1.787	1.529	.2574	1.491	.7303	4.332	.8809	.6220	.1351	.0866
#3	1.784	1.545	.2597	1.488	.7304	4.328	.8820	.6233	.1365	.0871

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.2255	.3018	9.886	.9713	.2869	.3458	1.738
Stddev	.0005	.0005	.047	.0041	.0014	.0007	.001
%RSD	.2031	.1701	.4772	.4245	.4791	.1906	.0345
#1	.2252	.3023	9.835	.9665	.2880	.3453	1.738
#2	.2253	.3013	9.928	.9740	.2874	.3465	1.739
#3	.2261	.3018	9.897	.9733	.2854	.3456	1.738

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2541.3	6097.0	50286.	4595.2
Stddev	2.0	3.4	313.	38.2
%RSD	.07948	.05576	.62331	.83166
#1	2539.7	6100.7	50588.	4580.2
#2	2540.8	6096.3	49962.	4566.7
#3	2543.6	6094.0	50308.	4638.6

Zoom In ▶ Zoom Out

Sample Name: MidStd Acquired: 5/23/2016 8:59:17 Type: Cal
Method: 60102007_041712(v134) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1417	7.752	.5183	31.03	18.00	11.67	11.41	5.447	.8699	1.433
Stddev	.0004	.029	.0012	.16	.08	.04	.01	.004	.0035	.001
%RSD	.3124	.3717	.2240	.5269	.4634	.3642	.0503	.0753	.3981	.0611
#1	.1421	7.742	.5176	30.89	17.95	11.65	11.42	5.450	.8660	1.433
#2	.1412	7.784	.5177	31.21	18.09	11.72	11.41	5.443	.8711	1.434
#3	.1419	7.729	.5197	31.00	17.95	11.64	11.41	5.449	.8726	1.433

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7.116	6.629	1.098	6.136	3.005	18.68	3.599	2.666	.5685	.3642
Stddev	.047	.026	.009	.006	.006	.10	.004	.002	.0010	.0008
%RSD	.6579	.3953	.7995	.0965	.2017	.5296	.1092	.0734	.1777	.2068
#1	7.081	6.611	1.098	6.129	2.999	18.65	3.598	2.668	.5674	.3635
#2	7.169	6.659	1.106	6.136	3.005	18.79	3.597	2.665	.5687	.3641
#3	7.098	6.618	1.089	6.141	3.011	18.60	3.604	2.665	.5693	.3650

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.9843	1.223	40.60	4.008	1.208	1.417	7.205
Stddev	.0005	.002	.20	.004	.001	.003	.005
%RSD	.0557	.1618	.4876	.0947	.1077	.2380	.0692
#1	.9842	1.222	40.48	4.004	1.210	1.413	7.210
#2	.9838	1.223	40.83	4.008	1.208	1.419	7.203
#3	.9849	1.226	40.50	4.011	1.207	1.420	7.201

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2293.7	5826.8	48552.	4563.3
Stddev	.8	2.7	144.	32.8
%RSD	.03318	.04674	.29737	.71961
#1	2293.1	5829.5	48684.	4547.7
#2	2294.6	5827.0	48574.	4541.2
#3	2293.6	5824.1	48398.	4601.1

Zoom In ▶ Zoom Out

Sample Name: HighStd Acquired: 5/23/2016 9:02:54 Type: Cal
Method: 60102007_041712(v134) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.2855	15.47	1.046	62.47	35.63	23.03	22.42	10.73	1.696	2.848
Stddev	.0003	.03	.002	.17	.08	.07	.04	.02	.004	.003
%RSD	.1115	.1980	.1899	.2731	.2166	.3032	.1834	.1712	.2382	.1200
#1	.2855	15.50	1.048	62.64	35.71	23.10	22.46	10.75	1.700	2.851
#2	.2859	15.45	1.045	62.30	35.56	22.96	22.38	10.72	1.693	2.845
#3	.2852	15.45	1.044	62.47	35.61	23.02	22.41	10.73	1.693	2.847

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	13.45	13.19	2.153	11.83	5.940	36.63	7.068	5.400	1.147	.7300
Stddev	.06	.04	.007	.10	.007	.07	.016	.017	.001	.0012
%RSD	.4187	.2873	.3457	.8328	.1149	.1792	.2326	.3117	.0683	.1632
#1	13.48	13.24	2.159	11.93	5.947	36.69	7.086	5.420	1.147	.7312
#2	13.38	13.16	2.145	11.83	5.934	36.56	7.056	5.391	1.147	.7288
#3	13.47	13.19	2.156	11.73	5.940	36.63	7.060	5.391	1.146	.7300

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.871	2.364	79.90	7.761	2.418	2.768	14.11
Stddev	.003	.007	1.85	.047	.003	.007	.04
%RSD	.1754	.3039	2.320	.6064	.1385	.2562	.2892
#1	1.875	2.373	80.11	7.744	2.421	2.775	14.16
#2	1.871	2.360	77.95	7.814	2.417	2.761	14.07
#3	1.868	2.360	81.64	7.725	2.415	2.769	14.11

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2129.4	5602.3	47155.	4440.2
Stddev	7.1	16.1	224.	43.8
%RSD	.33373	.28650	.47575	.98630
#1	2121.4	5586.8	46938.	4433.8
#2	2135.1	5618.8	47141.	4486.8
#3	2131.5	5601.2	47386.	4400.0

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Zoom In Zoom Out

Sample Name: HSTD Acquired: 5/23/2016 9:07:12 Type: QC
Method: 60102007_041712(v134) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5010	79.93	4.018	4.006	4.009	79.50	3.982	3.985	3.997	4.030
Stddev	.0012	.10	.010	.002	.004	.11	.009	.005	.005	.011
%RSD	.2348	.1273	.2467	.0380	.1035	.1365	.2137	.1331	.1221	.2719
#1	.5024	79.83	4.022	4.004	4.005	79.39	3.988	3.988	4.003	4.040
#2	.5005	79.92	4.025	4.005	4.013	79.52	3.986	3.987	3.993	4.033
#3	.5002	80.03	4.007	4.007	4.009	79.60	3.972	3.979	3.996	4.018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	78.07	79.87	79.49	3.945	3.995	79.82	3.974	4.047	4.022	4.008
Stddev	.05	.06	.19	.012	.006	.07	.006	.007	.005	.005
%RSD	.0636	.0702	.2360	.3066	.1639	.0828	.1627	.1741	.1271	.1159
#1	78.06	79.80	79.28	3.934	4.000	79.75	3.976	4.054	4.022	4.010
#2	78.13	79.90	79.54	3.958	3.998	79.82	3.979	4.047	4.028	4.012
#3	78.03	79.91	79.64	3.944	3.988	79.88	3.966	4.040	4.018	4.003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.959	3.944	3.966	3.954	4.016	3.977	3.976
Stddev	.005	.008	.065	.047	.008	.011	.008
%RSD	.1335	.2073	1.628	1.195	.1909	.2683	.2070
#1	3.959	3.944	3.964	3.928	4.024	3.989	3.980
#2	3.965	3.952	3.903	4.009	4.010	3.969	3.981
#3	3.954	3.936	4.032	3.927	4.012	3.973	3.966
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: HSTD Acquired: 5/23/2016 9:07:12 Type: QC
Method: 60102007_041712(v134) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2125.1	5605.8	47120.	4487.1
Stddev	1.5	8.2	45.	17.1
%RSD	.06999	.14567	.09575	.38025
#1	2124.5	5605.6	47161.	4496.0
#2	2124.0	5597.7	47128.	4497.9
#3	2126.8	5614.0	47072.	4467.4

Zoom In Zoom Out

Sample Name: ICV Acquired: 5/23/2016 9:13:42 Type: QC
Method: 60102007_041712(v134) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2452	41.17	2.002	2.087	2.058	41.96	2.026	2.047	2.013	2.000
Stddev	.0003	.12	.003	.001	.005	.11	.002	.002	.003	.003
%RSD	.1155	.3033	.1624	.0374	.2678	.2657	.0829	.0944	.1236	.1586
#1	.2450	41.13	1.999	2.087	2.055	41.94	2.024	2.044	2.012	1.999
#2	.2456	41.31	2.002	2.087	2.064	42.08	2.026	2.047	2.012	2.003
#3	.2452	41.07	2.006	2.086	2.054	41.86	2.027	2.048	2.016	1.997
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.53	41.73	42.27	2.067	1.894	42.06	2.056	2.012	2.031	2.043
Stddev	.05	.09	.19	.003	.004	.11	.000	.004	.005	.001
%RSD	.1164	.2135	.4392	.1543	.2035	.2580	.0050	.1772	.2462	.0465
#1	40.52	41.67	42.34	2.068	1.890	42.03	2.056	2.009	2.025	2.042
#2	40.49	41.84	42.41	2.064	1.896	42.18	2.056	2.016	2.035	2.043
#3	40.58	41.70	42.06	2.070	1.897	41.97	2.056	2.011	2.032	2.043
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0782	2.024	1.936	1.932	2.090	1.882	2.045
Stddev	.0014	.001	.006	.002	.006	.002	.002
%RSD	1.743	.0681	.3375	.1134	.2803	.1202	.0730
#1	.0791	2.024	1.933	1.930	2.083	1.882	2.044
#2	.0789	2.023	1.943	1.931	2.094	1.885	2.045
#3	.0767	2.026	1.931	1.934	2.093	1.880	2.047
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: ICV Acquired: 5/23/2016 9:13:42 Type: QC
Method: 60102007_041712(v134) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2295.4	5797.5	48750.	4528.4
Stddev	2.1	6.1	334.	2.1
%RSD	.09304	.10563	.68433	.04654
#1	2294.0	5791.9	48600.	4530.1
#2	2294.4	5804.0	49132.	4526.0
#3	2297.8	5796.7	48517.	4528.9

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Zoom In Zoom Out

Sample Name: ICB Acquired: 5/23/2016 9:20:17 Type: QC
Method: 60102007_041712(v134) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0110	-.0005	.0006	.0004	.0060	.0001	.0001	.0003
Stddev	.0002	.0014	.0003	.0001	.0000	.0021	.0001	.0000	.0001
%RSD	79.34	13.18	58.27	8.453	7.859	35.24	77.79	55.48	22.69
#1	-.0003	.0124	-.0003	.0006	.0004	.0063	.0001	.0000	.0003
#2	.0000	.0095	-.0008	.0006	.0004	.0038	.0001	.0001	.0003
#3	-.0003	.0110	-.0004	.0005	.0004	.0080	.0000	.0001	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0162	.0255	.0060	.0003	F.0010	.0337	.0000	-.0001
Stddev	.0002	.0023	.0197	.0070	.0000	.0002	.0096	.0001	.0006
%RSD	85.35	14.36	77.41	115.7	15.96	16.11	28.52	265.1	442.8
#1	.0003	.0141	.0175	.0134	.0004	.0012	.0356	.0001	-.0007
#2	.0000	.0187	.0479	.0050	.0003	.0010	.0233	.0001	.0005
#3	.0005	.0157	.0110	-.0004	.0003	.0008	.0422	-.0001	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0012	-.0002	.0001	.0006	.0004	.0007	.0002	.0003	.0000
Stddev	.0006	.0012	.0002	.0002	.0001	.0001	.0001	.0002	.000
%RSD	51.28	484.0	235.3	40.85	14.91	17.55	36.21	55.38	139.9
#1	.0011	-.0007	.0003	.0006	.0004	.0007	.0002	.0005	.0000
#2	.0018	.0011	.0001	.0007	.0005	.0007	.0002	.0002	.0000
#3	.0006	-.0012	-.0001	.0003	.0005	.0005	.0003	.0002	-.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: ICB Acquired: 5/23/2016 9:20:17 Type: QC
Method: 60102007_041712(v134) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2695.7	6038.9	51170.	4545.6
Stddev	6.2	4.9	234.	60.9
%RSD	.22970	.08038	.45748	1.3407
#1	2689.4	6033.8	50904.	4588.5
#2	2701.8	6043.5	51344.	4572.5
#3	2695.8	6039.5	51262.	4475.9

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/23/2016 9:24:09 Type: QC
Method: 60102007_041712(v134) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0089	.2305	.0098	.2135	.0053	1.074	.0054	.0546	.0104	.0277
Stddev	.0004	.0079	.0000	.0007	.0001	.005	.0000	.0002	.0003	.0002
%RSD	5.048	3.440	.4342	.3401	2.142	.4379	.1704	.3642	2.654	.6501
#1	.0094	.2284	.0098	.2140	.0054	1.077	.0054	.0547	.0102	.0276
#2	.0085	.2239	.0098	.2127	.0052	1.068	.0054	.0544	.0107	.0279
#3	.0088	.2393	.0098	.2140	.0054	1.076	.0054	.0547	.0105	.0275
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3173	10.56	5.365	.0165	.0506	10.54	.0440	.0045	.0056	.0099
Stddev	.0022	.04	.030	.0001	.0001	.04	.0004	.0001	.0003	.0005
%RSD	.7055	.3943	.5684	.4144	.2381	.3886	.8391	1.495	6.195	4.661
#1	.3173	10.56	5.387	.0164	.0505	10.55	.0443	.0046	.0058	.0096
#2	.3151	10.52	5.379	.0165	.0505	10.49	.0440	.0045	.0059	.0098
#3	.3195	10.60	5.330	.0165	.0507	10.57	.0436	.0044	.0052	.0105
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1027	.0542	.0102	.0104	.0101	.0492	.0218
Stddev	.0007	.0001	.0000	.0000	.0007	.0003	.0000
%RSD	.6844	.1266	.1824	.2705	7.422	.6017	.1350
#1	.1024	.0542	.0102	.0104	.0109	.0493	.0218
#2	.1022	.0543	.0102	.0104	.0096	.0488	.0218
#3	.1035	.0542	.0102	.0104	.0096	.0494	.0218
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/23/2016 9:24:09 Type: QC
Method: 60102007_041712(v134) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2583.0	5968.2	50003.	4573.1
Stddev	3.8	12.7	199.	15.1
%RSD	.14565	.21326	.39835	.33008
#1	2581.4	5954.8	50194.	4556.2
#2	2587.3	5980.1	49796.	4585.2
#3	2580.4	5969.9	50018.	4578.0

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Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/23/2016 9:30:34 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0007	505.6	-.0018	.0009	.0001	474.8	.0000	-.0003	.0000	.0000
Stddev	.0004	2.8	.0012	.0002	.0001	1.1	.0001	.0001	.0001	.0002
%RSD	57.40	.5467	63.64	28.52	108.8	.2315	304.5	42.03	483.1	1037.
#1	-.0004	502.7	-.0014	.0010	.0000	473.6	.0001	-.0002	.0000	.0001
#2	-.0005	508.1	-.0031	.0010	.0002	475.5	.0001	-.0005	-.0001	.0002
#3	-.0011	506.1	-.0010	.0006	.0000	475.5	-.0001	-.0004	.0001	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	180.4	.1555	506.8	.0000	.0005	.2197	-.0007	.0001	.0000	.0004
Stddev	.6	.0200	1.9	.000	.0002	.0103	.0000	.0010	.0019	.0028
%RSD	.3240	12.83	.3710	1634.	37.91	4.689	3.826	708.7	4290.	647.9
#1	180.4	.1350	505.0	.0001	.0006	.2143	-.0007	.0013	.0013	-.0004
#2	181.0	.1566	508.7	.0000	.0004	.2132	-.0007	-.0002	.0009	-.0019
#3	179.9	.1748	506.8	-.0001	.0003	.2316	-.0007	-.0007	-.0021	.0036
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0152	.0001	.0001	.0000	.0000	.0005	-.0002
Stddev	.0002	.0003	.0002	.000	.001	.0003	.0000
%RSD	1.240	372.4	187.5	127.1	2168.	55.39	29.07
#1	.0150	.0004	.0001	-.0001	.0002	.0008	-.0002
#2	.0154	-.0001	.0002	.0000	-.0007	.0003	-.0001
#3	.0152	.0000	-.0001	.0000	.0005	.0004	-.0001
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/23/2016 9:30:34 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2064.1	5398.9	43394.	4396.7
Stddev	1.7	.8	36.	18.1
%RSD	.08223	.01437	.08299	.41147
#1	2062.3	5399.7	43366.	4415.9
#2	2064.4	5398.2	43435.	4380.0
#3	2065.7	5398.7	43382.	4394.2

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 5/23/2016 9:37:04 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.002	502.4	1.102	.5284	.5013	481.2	.9740	.4874	.5083	.5425
Stddev	.002	5.8	.001	.0028	.0024	2.7	.0010	.0006	.0013	.0001
%RSD	.1802	1.148	.1009	.5329	.4752	.5698	.1007	.1228	.2629	.0187
#1	1.004	509.0	1.100	.5252	.4988	478.6	.9729	.4872	.5078	.5425
#2	1.003	499.6	1.103	.5293	.5014	484.1	.9749	.4881	.5098	.5424
#3	1.000	498.5	1.102	.5306	.5036	481.0	.9743	.4869	.5072	.5425
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	178.8	.1109	502.6	.5147	.9337	.2017	.9919	.9617	1.026	1.034
Stddev	1.0	.0100	2.1	.0008	.0016	.0084	.0013	.0030	.004	.002
%RSD	.5374	9.043	.4201	.1547	.1700	4.176	.1303	.3102	.3958	.1407
#1	177.9	.1202	500.9	.5147	.9319	.1983	.9904	.9586	1.022	1.033
#2	178.8	.1123	502.1	.5155	.9349	.1955	.9928	.9621	1.030	1.035
#3	179.8	.1003	505.0	.5139	.9344	.2113	.9924	.9645	1.025	1.032
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0676	.9473	.9776	.9844	.9533	.4771	.9752
Stddev	.0005	.0022	.0048	.0007	.0053	.0005	.0005
%RSD	.7391	.2320	.4911	.0682	.5537	.1135	.0488
#1	.0681	.9459	.9723	.9843	.9566	.4765	.9748
#2	.0671	.9499	.9789	.9851	.9472	.4776	.9757
#3	.0677	.9462	.9816	.9837	.9560	.4771	.9752
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 5/23/2016 9:37:04 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2023.9	5285.9	43841.	4410.0
Stddev	1.1	9.1	132.	33.4
%RSD	.05587	.17193	.30189	.75700
#1	2024.7	5293.7	43846.	4407.6
#2	2022.6	5275.9	43707.	4444.5
#3	2024.5	5287.9	43971.	4377.9

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/23/2016 9:44:30 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2504	40.77	2.028	2.024	1.995	40.81	2.025	2.027	1.969	1.992
Stddev	.0010	.11	.004	.008	.009	.07	.001	.002	.005	.004
%RSD	.4190	.2615	.1982	.4105	.4414	.1770	.0666	.0756	.2531	.2130
#1	.2516	40.88	2.024	2.032	2.005	40.89	2.024	2.025	1.973	1.989
#2	.2497	40.75	2.032	2.024	1.993	40.75	2.027	2.028	1.971	1.997
#3	.2499	40.67	2.028	2.015	1.988	40.79	2.025	2.026	1.964	1.990
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.32	40.49	40.35	2.029	2.038	40.03	2.048	1.967	2.030	2.034
Stddev	.25	.15	.13	.004	.004	.14	.001	.002	.002	.007
%RSD	.6062	.3611	.3205	.1864	.2113	.3521	.0512	.0846	.1196	.3513
#1	41.57	40.65	40.49	2.033	2.033	40.19	2.048	1.966	2.032	2.028
#2	41.32	40.45	40.31	2.025	2.039	39.98	2.049	1.969	2.027	2.042
#3	41.07	40.37	40.24	2.030	2.041	39.92	2.047	1.968	2.030	2.032
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.107	2.085	2.005	2.017	1.989	2.020	2.027
Stddev	.002	.001	.009	.001	.009	.002	.002
%RSD	.0739	.0627	.4350	.0710	.4372	.1092	.0738
#1	2.105	2.087	2.013	2.019	1.980	2.020	2.027
#2	2.106	2.085	2.006	2.017	1.997	2.023	2.029
#3	2.108	2.084	1.996	2.017	1.989	2.018	2.026
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/23/2016 9:44:30 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2287.5	5717.2	48703.	4510.1
Stddev	1.3	2.2	184.	34.5
%RSD	.05608	.03905	.37724	.76557
#1	2288.9	5719.2	48521.	4478.3
#2	2286.4	5714.8	48700.	4546.8
#3	2287.1	5717.5	48889.	4505.2

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/23/2016 9:51:19 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0144	-.0006	.0002	.0000	-.0024	.0002	.0002	.0003	.0002
Stddev	.0004	.0063	.0001	.0001	.0000	.0022	.0000	.0001	.0003	.0003
%RSD	1119.	43.97	24.19	48.36	73.91	91.26	25.23	26.84	81.11	163.9
#1	-.0004	.0083	-.0004	.0001	.0001	-.0006	.0002	.0003	.0001	.0004
#2	.0004	.0210	-.0007	.0001	.0000	-.0017	.0003	.0002	.0007	.0003
#3	.0000	.0140	-.0006	.0003	.0000	-.0048	.0002	.0002	.0002	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0110	-.0009	-.0039	.0001	.0006	.0327	.0002	-.0008	.0013	.0005
Stddev	.0020	.0273	.0321	.0001	.0001	.0091	.0002	.0006	.0014	.0007
%RSD	18.65	3049.	831.6	48.00	11.94	27.79	85.29	66.37	102.5	139.8
#1	.0104	.0273	-.0402	.0001	.0006	.0222	.0004	-.0002	.0025	.0003
#2	.0132	-.0028	.0080	.0001	.0007	.0383	.0000	-.0012	.0016	.0013
#3	.0092	-.0271	.0207	.0002	.0005	.0376	.0003	-.0011	-.0002	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0019	.0004	.0000	.0003	.0000	.0003	.0002
Stddev	.0003	.0002	.0001	.0000	.0002	.0003	.0000
%RSD	17.96	55.61	166.0	8.799	2655.	100.5	22.74
#1	.0019	.0003	.0000	.0003	.0001	.0000	.0002
#2	.0016	.0003	.0001	.0003	-.0002	.0005	.0002
#3	.0023	.0007	.0001	.0003	.0002	.0002	.0001
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/23/2016 9:51:19 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2685.7	6024.0	51062.	4572.5
Stddev	2.4	5.8	35.	15.6
%RSD	.08918	.09550	.06821	.34010
#1	2683.2	6017.6	51022.	4556.2
#2	2688.0	6028.6	51086.	4574.3
#3	2685.8	6025.9	51077.	4587.1

Zoom In Zoom Out

Sample Name: FA33973-3 Acquired: 5/23/2016 9:54:59 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 50.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0002	279.0	.2100	1.935	.0831	93.55	.0098	.1106	.2179	.3450
Stddev	.0152	1.1	.0318	.011	.0033	.37	.0025	.0042	.0078	.0079
%RSD	9327.	.3776	15.15	.5401	4.000	.3906	25.96	3.804	3.575	2.295
#1	-.0016	279.7	.1827	1.943	.0850	93.95	.0127	.1138	.2125	.3500
#2	-.0141	277.8	.2025	1.923	.0793	93.23	.0080	.1059	.2269	.3358
#3	.0161	279.5	.2450	1.939	.0851	93.46	.0086	.1122	.2144	.3491

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	428.3	63.88	57.35	6.844	.0262	2.500	.1856	.5610	-.0319	-.0746
Stddev	1.3	.57	2.11	.007	.0065	.577	.0012	.0172	.0091	.0665
%RSD	.2922	.8874	3.671	.1030	24.84	23.07	.6614	3.060	28.41	89.11
#1	429.1	64.03	58.56	6.852	.0305	2.149	.1849	.5466	-.0421	-.0476
#2	428.9	64.35	58.56	6.840	.0295	3.166	.1870	.5800	-.0288	-.0259
#3	426.8	63.25	54.92	6.841	.0187	2.186	.1848	.5564	-.0248	-.1503

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	19.44	.0712	.6258	6.241	.0051	.4825	1.587
Stddev	.02	.0078	.0044	.012	.0177	.0097	.001
%RSD	.0801	11.00	.6959	.1924	347.2	2.021	.0635
#1	19.43	.0681	.6301	6.254	.0255	.4789	1.587
#2	19.43	.0802	.6214	6.238	-.0042	.4750	1.586
#3	19.46	.0654	.6259	6.231	-.0060	.4935	1.588

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2649.1	6757.8	56861.	5032.0
Stddev	3.2	10.7	109.	21.2
%RSD	.12196	.15779	.19094	.42102
#1	2650.9	6763.7	56787.	5054.8
#2	2651.2	6764.2	56986.	5028.1
#3	2645.4	6745.5	56810.	5013.0

Zoom In Zoom Out

Sample Name: FA34023-1 Acquired: 5/23/2016 9:59:03 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 4.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0003	162.9	.0678	.8211	.0075	F2106.	.0009	.0829	.2588
Stddev	.0016	.7	.0022	.0033	.0005	39.	.0003	.0004	.0007
%RSD	463.1	.4418	3.241	.4044	6.177	1.862	36.72	.4962	.2679
#1	-.0004	163.7	.0703	.8245	.0077	2147.	.0010	.0828	.2584
#2	.0022	162.6	.0666	.8207	.0070	2102.	.0005	.0833	.2585
#3	-.0007	162.3	.0663	.8179	.0079	2069.	.0012	.0825	.2596

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.1298	253.8	13.12	149.5	4.072	.0057	4.472	.1772	.2125
Stddev	.0011	1.7	.10	1.2	.012	.0004	.037	.0008	.0004
%RSD	.8197	.6874	.7811	.8222	.2844	7.144	.8192	.4763	.1850
#1	.1290	254.5	13.19	150.1	4.076	.0053	4.448	.1781	.2124
#2	.1310	255.1	13.16	150.3	4.082	.0058	4.514	.1770	.2121
#3	.1293	251.8	13.00	148.1	4.059	.0061	4.454	.1765	.2129

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0010	-.0060	15.34	.0191	2.890	.9690	-.0086	.3203	.7109
Stddev	.0019	.0044	.01	.0010	.008	.0025	.0024	.0014	.0008
%RSD	183.0	73.74	.0528	5.102	.2860	.2535	28.26	.4263	.1167
#1	.0023	-.0010	15.34	.0186	2.897	.9694	-.0104	.3210	.7103
#2	.0018	-.0078	15.33	.0184	2.893	.9712	-.0058	.3212	.7118
#3	-.0011	-.0092	15.34	.0202	2.881	.9663	-.0094	.3187	.7105

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2205.5	6188.6	50416.	4841.8
Stddev	5.3	1.8	282.	88.7
%RSD	.24157	.02903	.55935	1.8325
#1	2201.5	6190.7	50305.	4806.4
#2	2211.6	6187.7	50206.	4776.2
#3	2203.4	6187.5	50736.	4942.7

Zoom In Zoom Out

Sample Name: FA33933-1 Acquired: 5/23/2016 10:03:13 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 100.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0055	26.11	.0012	79.74	-.0033	139.7	.0545	.0125	132.3
Stddev	.0186	.48	.0254	.10	.0062	1.0	.0031	.0031	.2
%RSD	340.3	1.823	2175.	.1311	185.9	.7056	5.682	24.71	.1884
#1	-.0197	25.77	-.0178	79.86	.0038	140.6	.0509	.0140	132.5
#2	.0156	25.91	.0300	79.72	-.0069	139.8	.0563	.0089	132.0
#3	-.0123	26.66	-.0087	79.65	-.0068	138.6	.0563	.0145	132.4

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.4567	181.1	.8911	5.458	1.298	32.70	6.616	.0234	F593.8
Stddev	.0146	.3	1.161	1.243	.006	.06	.797	.0065	.7
%RSD	3.188	.1786	130.3	22.77	.4710	.1978	12.05	27.53	.1260
#1	.4696	181.3	-.3714	5.620	1.304	32.63	5.709	.0196	593.5
#2	.4409	180.7	1.131	4.142	1.298	32.70	7.203	.0309	593.3
#3	.4595	181.2	1.914	6.612	1.292	32.76	6.937	.0198	594.7

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.396	-.0785	5.794	5.313	1.506	.9538	-.0388	.0439	F754.4
Stddev	.059	.0513	.033	.005	.005	.0701	.0405	.0226	.5
%RSD	1.731	65.36	.5740	.1014	.3452	7.347	104.3	51.42	.0618
#1	3.448	-.1377	5.756	5.314	1.511	.9486	-.0092	.0351	754.3
#2	3.332	-.0516	5.814	5.317	1.506	.8864	-.0223	.0271	753.9
#3	3.408	-.0463	5.813	5.307	1.501	1.026	-.0850	.0696	754.8

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2659.9	6023.7	51072.	4536.2
Stddev	.6	5.3	287.	7.9
%RSD	.02155	.08794	.56241	.17324
#1	2660.1	6023.7	50752.	4539.5
#2	2659.3	6018.4	51159.	4527.3
#3	2660.4	6028.9	51306.	4541.9

Zoom In Zoom Out

Sample Name: FA33933-2 Acquired: 5/23/2016 10:07:16 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 100.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0010	25.07	-.0061	87.36	-.0030	141.4	.0218	-.0066	114.1
Stddev	.0216	.66	.0383	.11	.0024	.8	.0056	.0069	.6
%RSD	2167.	2.647	628.9	.1252	79.84	.5905	25.72	105.2	.5302
#1	.0225	25.40	.0020	87.24	-.0029	140.7	.0153	-.0081	114.7
#2	-.0200	25.50	.0275	87.40	-.0054	141.2	.0245	-.0126	114.0
#3	-.0054	24.30	-.0478	87.45	-.0007	142.3	.0255	.0010	113.5

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.1347	41.30	.9564	6.914	.6076	28.92	5.445	-.0015	F507.9
Stddev	.0227	.48	2.950	.646	.0067	.03	.656	.0091	.9
%RSD	16.82	1.154	308.4	9.342	1.103	.1119	12.04	603.7	.1807
#1	.1184	41.17	.2015	6.809	.6152	28.91	5.818	-.0114	507.6
#2	.1250	40.90	-1.543	7.605	.6049	28.89	4.688	.0001	507.2
#3	.1606	41.83	4.210	6.326	.6026	28.95	5.829	.0067	508.9

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.353	.0120	5.690	4.641	1.852	.9184	-.0545	.0564	297.2
Stddev	.114	.1170	.065	.007	.002	.0763	.0142	.0175	.3
%RSD	4.845	973.8	1.137	.1571	.0789	8.308	25.99	30.94	.1081
#1	2.223	-.1005	5.684	4.642	1.850	1.002	-.0641	.0552	297.0
#2	2.395	.0036	5.628	4.633	1.852	.8525	-.0382	.0745	296.9
#3	2.439	.1330	5.757	4.648	1.853	.9007	-.0613	.0396	297.5

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2662.9	6038.9	50809.	4514.3
Stddev	5.7	4.4	282.	43.2
%RSD	.21385	.07230	.55435	.95664
#1	2665.3	6040.3	50523.	4521.7
#2	2667.0	6042.5	50818.	4553.2
#3	2656.4	6034.1	51086.	4467.8

Zoom In Zoom Out

Sample Name: FA33933-3 Acquired: 5/23/2016 10:11:19 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 50.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0004	39.86	-.0094	95.75	.0007	107.6	.0751	-.0011	3.069
Stddev	.0091	.23	.0169	.17	.0022	.2	.0026	.0046	.007
%RSD	2121.	.5850	179.2	.1747	313.4	.1857	3.476	427.9	.2196
#1	-.0107	40.12	-.0140	95.93	-.0019	107.5	.0732	.0035	3.073
#2	.0064	39.77	.0093	95.61	.0018	107.8	.0780	-.0010	3.061
#3	.0030	39.68	-.0235	95.69	.0022	107.6	.0740	-.0057	3.072

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.4311	17.71	.1460	9.202	.4872	.2360	9.182	.0216	15.77
Stddev	.0154	.04	1.754	.574	.0008	.0017	.203	.0104	.02
%RSD	3.567	.2310	1202.	6.236	.1597	.7383	2.216	48.29	.1537
#1	.4428	17.66	.3058	9.301	.4878	.2373	9.277	.0335	15.80
#2	.4137	17.75	1.815	9.720	.4874	.2340	9.321	.0174	15.77
#3	.4369	17.71	-1.683	8.585	.4863	.2366	8.949	.0139	15.75

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0386	.0122	4.436	.2623	1.566	2.488	-.0029	.0084	F319.3
Stddev	.0534	.0171	.039	.0132	.008	.113	.0182	.0048	.2
%RSD	138.3	140.2	.8670	5.043	.4828	4.551	621.8	57.61	.0521
#1	.1000	.0099	4.481	.2640	1.568	2.399	-.0236	.0138	319.1
#2	.0039	.0304	4.416	.2484	1.557	2.449	.0041	.0045	319.4
#3	.0118	-.0037	4.412	.2747	1.572	2.615	.0107	.0068	319.3

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2664.5	6092.1	50862.	4458.1
Stddev	3.0	5.9	127.	27.3
%RSD	.11351	.09621	.24955	.61188
#1	2665.5	6091.3	50878.	4445.2
#2	2661.1	6086.6	50727.	4439.7
#3	2666.9	6098.3	50980.	4489.5

Zoom In Zoom Out

Sample Name: FA34083-3 Acquired: 5/23/2016 10:15:24 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0003	.2359	-.0014	.0429	.0000	95.62	-.0001	-.0003	.0016	.0017
Stddev	.0003	.0246	.0007	.0002	.000	.43	.0001	.0000	.0006	.0003
%RSD	107.6	10.44	49.61	.4467	123.4	.4460	79.56	12.75	33.81	19.88
#1	.0000	.2188	-.0006	.0427	.0000	96.05	-.0001	-.0003	.0018	.0019
#2	-.0005	.2641	-.0019	.0429	-.0001	95.20	-.0002	-.0003	.0021	.0013
#3	-.0003	.2248	-.0015	.0431	.0000	95.59	.0000	-.0003	.0010	.0020

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	41.66	1.196	5.286	.1413	-.0011	100.2	-.0010	.0029	.0037	.0108
Stddev	.17	.042	.012	.0005	.0001	.3	.0004	.0015	.0011	.0019
%RSD	.4054	3.530	.2352	.3340	12.16	.2976	42.60	53.69	30.59	17.31
#1	41.79	1.150	5.272	.1419	-.0009	100.5	-.0012	.0028	.0038	.0110
#2	41.47	1.204	5.290	.1410	-.0010	99.91	-.0005	.0045	.0025	.0088
#3	41.73	1.234	5.296	.1411	-.0012	100.3	-.0014	.0014	.0048	.0126

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	6.675	.0000	.3338	.0033	-.0005	.0029	.0154
Stddev	.017	.0003	.0014	.0003	.0004	.0002	.0003
%RSD	.2487	2004.	.4173	7.909	87.10	7.159	1.769
#1	6.673	.0000	.3346	.0036	-.0007	.0031	.0157
#2	6.660	-.0003	.3322	.0031	-.0008	.0030	.0153
#3	6.693	.0004	.3346	.0033	.0000	.0027	.0151

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2479.1	6042.7	49320.	4619.0
Stddev	2.0	7.5	113.	27.9
%RSD	.07907	.12478	.22940	.60413
#1	2478.6	6051.4	49191.	4592.1
#2	2477.4	6038.9	49399.	4617.1
#3	2481.2	6037.8	49372.	4647.8

Zoom In Zoom Out

Sample Name: FA34066-1 Acquired: 5/23/2016 10:19:29 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0005	254.4	.0394	3.684	.0088	72.79	.0093	.0125	.3155	.1870
Stddev	.0005	.4	.0013	.008	.0006	.09	.0001	.0002	.0032	.0032
%RSD	87.23	.1643	3.255	.2102	6.405	.1294	.5763	1.820	1.006	1.690
#1	-.0007	254.4	.0395	3.680	.0094	72.85	.0094	.0126	.3132	.1906
#2	.0000	253.9	.0407	3.679	.0084	72.68	.0094	.0123	.3191	.1859
#3	-.0009	254.8	.0381	3.693	.0085	72.83	.0093	.0127	.3142	.1846

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	203.5	2.873	8.066	1.556	-.0001	4.886	.0814	2.577	.0001	.0046
Stddev	.3	.208	.058	.003	.0003	.032	.0011	.006	.0058	.0063
%RSD	.1333	7.228	.7135	.2024	284.3	.6483	1.392	.2509	5444.	135.8
#1	203.4	3.099	8.054	1.556	.0002	4.921	.0818	2.574	-.0063	.0119
#2	203.4	2.692	8.129	1.560	-.0005	4.880	.0823	2.584	.0051	.0016
#3	203.8	2.827	8.016	1.553	-.0001	4.859	.0801	2.572	.0015	.0005

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	14.98	.1237	4.952	1.240	-.0005	.1079	3.548
Stddev	.02	.0037	.013	.001	.0126	.0008	.006
%RSD	.1443	3.026	.2517	.1111	2365.	.7191	.1603
#1	15.00	.1194	4.951	1.240	-.0048	.1074	3.543
#2	14.96	.1264	4.941	1.241	-.0104	.1076	3.545
#3	14.98	.1253	4.966	1.238	.0136	.1088	3.554

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2583.0	6911.5	56924.	5037.9
Stddev	5.1	16.8	174.	38.2
%RSD	.19653	.24378	.30547	.75915
#1	2588.5	6925.2	57078.	5002.8
#2	2578.5	6916.5	56735.	5032.2
#3	2582.0	6892.7	56958.	5078.6

Zoom In Zoom Out

Sample Name: MP30377-D1 Acquired: 5/23/2016 10:23:33 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0026	309.9	.0356	4.429	.0106	91.34	.0111	.0124	.3894	.2181
Stddev	.0009	.8	.0048	.011	.0009	.29	.0006	.0007	.0018	.0023
%RSD	35.97	.2578	13.46	.2579	8.071	.3175	5.194	5.748	.4641	1.052
#1	.0021	310.1	.0382	4.429	.0115	91.37	.0112	.0131	.3878	.2156
#2	.0020	310.5	.0386	4.440	.0106	91.62	.0115	.0123	.3891	.2201
#3	.0037	309.0	.0301	4.417	.0098	91.04	.0104	.0117	.3914	.2186

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	101.3	3.937	9.849	1.399	-.0005	5.892	.0991	2.993	.0048	-.0045
Stddev	.2	.151	.217	.001	.0007	.068	.0020	.009	.0027	.0027
%RSD	.1866	3.839	2.206	.0450	133.9	1.158	1.992	.2830	57.01	59.42
#1	101.5	4.018	10.04	1.400	-.0013	5.960	.0973	2.989	.0067	-.0021
#2	101.3	4.030	9.898	1.399	.0002	5.824	.1012	2.987	.0060	-.0041
#3	101.1	3.763	9.612	1.398	-.0005	5.891	.0989	3.003	.0017	-.0074

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	12.82	.0958	5.804	1.463	-.0012	.1245	3.909
Stddev	.01	.0027	.008	.003	.0039	.0010	.001
%RSD	.1009	2.839	.1383	.1737	318.4	.7724	.0332
#1	12.82	.0989	5.803	1.461	-.0018	.1251	3.908
#2	12.83	.0938	5.813	1.463	-.0048	.1250	3.910
#3	12.81	.0947	5.797	1.466	.0029	.1234	3.909

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2565.2	7056.4	58294.	5223.7
Stddev	4.8	4.4	184.	51.1
%RSD	.18757	.06226	.31553	.97733
#1	2564.3	7051.4	58082.	5165.6
#2	2570.5	7059.5	58405.	5244.0
#3	2561.0	7058.3	58396.	5261.5

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: MP30377-S1 Acquired: 5/23/2016 10:27:36 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0529	344.1	1.888	6.534	.0613	111.8	.0606	.5091	.5712	.5104
Stddev	.0008	1.4	.005	.027	.0007	.5	.0007	.0011	.0029	.0005
%RSD	1.453	.3934	.2417	.4072	1.219	.4888	1.162	.2110	.5072	.1031
#1	.0526	345.3	1.884	6.560	.0607	112.2	.0598	.5089	.5724	.5103
#2	.0538	344.5	1.886	6.535	.0621	111.9	.0612	.5082	.5679	.5110
#3	.0524	342.6	1.893	6.507	.0610	111.2	.0609	.5103	.5734	.5100

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	130.9	28.28	34.68	1.988	.4233	30.34	.6064	3.690	.2128	1.886
Stddev	.8	.01	.35	.004	.0002	.25	.0011	.006	.0081	.013
%RSD	.6495	.0461	1.007	.1843	.0569	.8104	.1768	.1705	3.807	.6965
#1	131.6	28.29	35.00	1.987	.4231	30.39	.6075	3.684	.2213	1.873
#2	131.0	28.26	34.72	1.992	.4233	30.56	.6053	3.690	.2118	1.887
#3	130.0	28.27	34.31	1.985	.4236	30.08	.6065	3.696	.2052	1.899

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	13.67	.6215	6.451	1.795	2.225	.5821	4.430
Stddev	.02	.0013	.025	.004	.011	.0030	.009
%RSD	.1180	.2028	.3792	.2101	.4912	.5125	.1998
#1	13.66	.6220	6.462	1.793	2.212	.5808	4.422
#2	13.66	.6224	6.468	1.799	2.230	.5800	4.439
#3	13.69	.6200	6.423	1.792	2.231	.5855	4.428

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2530.8	7029.9	58526.	5224.1
Stddev	5.1	14.5	378.	78.3
%RSD	.20197	.20610	.64521	1.4992
#1	2531.1	7032.6	58805.	5150.2
#2	2525.6	7014.2	58096.	5215.8
#3	2535.8	7042.8	58677.	5306.2

Zoom In Zoom Out

Sample Name: MP30377-S2 Acquired: 5/23/2016 10:31:35 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0485	331.4	1.831	6.163	.0586	287.0	.0583	.4889	.5587	.4334
Stddev	.0019	.5	.005	.012	.0007	.4	.0004	.0014	.0027	.0033
%RSD	3.900	.1403	.2784	.1981	1.205	.1224	.7309	.2835	.4880	.7508
#1	.0506	330.9	1.829	6.153	.0584	287.3	.0583	.4894	.5617	.4303
#2	.0476	331.8	1.837	6.177	.0581	287.2	.0588	.4874	.5564	.4331
#3	.0471	331.5	1.828	6.160	.0594	286.6	.0580	.4901	.5581	.4368

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	150.9	26.77	33.15	1.895	.4109	29.14	.5813	3.494	.2038	1.813
Stddev	.5	.21	.24	.007	.0013	.11	.0020	.014	.0070	.014
%RSD	.3148	.7743	.7319	.3502	.3276	.3941	.3526	.4124	3.426	.7805
#1	150.4	26.65	33.11	1.899	.4111	29.18	.5809	3.486	.2088	1.804
#2	151.4	27.01	33.40	1.887	.4095	29.24	.5795	3.486	.2069	1.829
#3	151.0	26.64	32.92	1.899	.4121	29.02	.5835	3.511	.1958	1.806

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	13.73	.6322	6.183	1.784	2.120	.5698	4.370
Stddev	.03	.0017	.015	.002	.009	.0021	.003
%RSD	.2100	.2632	.2403	.0878	.4461	.3656	.0660
#1	13.70	.6329	6.170	1.784	2.131	.5719	4.367
#2	13.76	.6303	6.199	1.782	2.114	.5696	4.370
#3	13.74	.6335	6.180	1.786	2.115	.5677	4.372

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2507.2	6934.5	57749.	5196.5
Stddev	4.3	12.6	409.	48.3
%RSD	.17235	.18166	.70907	.92869
#1	2502.6	6921.2	57555.	5144.4
#2	2511.2	6946.3	58220.	5205.5
#3	2507.8	6935.8	57473.	5239.7

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/23/2016 10:35:33 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2561	41.03	2.027	2.075	2.056	41.08	2.059	2.054	2.049	2.036
Stddev	.0011	.03	.004	.004	.002	.04	.003	.003	.009	.003
%RSD	.4459	.0657	.2117	.1857	.0973	.0975	.1369	.1313	.4238	.1398
#1	.2554	41.04	2.026	2.071	2.055	41.10	2.059	2.054	2.039	2.033
#2	.2555	41.05	2.031	2.078	2.059	41.11	2.062	2.056	2.055	2.038
#3	.2574	41.00	2.023	2.076	2.055	41.04	2.056	2.051	2.054	2.038
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	43.00	41.69	41.08	2.085	2.055	41.59	2.047	2.025	2.028	2.026
Stddev	.14	.04	.11	.006	.003	.02	.005	.001	.005	.005
%RSD	.3286	.0946	.2590	.2840	.1502	.0564	.2326	.0645	.2381	.2278
#1	42.84	41.65	41.17	2.081	2.051	41.57	2.050	2.026	2.027	2.031
#2	43.09	41.70	41.11	2.083	2.057	41.61	2.049	2.024	2.033	2.024
#3	43.06	41.73	40.96	2.092	2.055	41.58	2.041	2.026	2.023	2.023
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.098	2.052	2.076	2.091	2.051	2.039	2.054
Stddev	.002	.007	.003	.003	.002	.003	.005
%RSD	.1044	.3379	.1525	.1374	.0905	.1570	.2297
#1	2.098	2.057	2.073	2.088	2.052	2.036	2.056
#2	2.100	2.055	2.078	2.090	2.049	2.040	2.056
#3	2.096	2.044	2.078	2.094	2.051	2.042	2.048
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/23/2016 10:35:33 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2270.8	5773.5	47844.	4386.9
Stddev	4.5	17.7	314.	5.4
%RSD	.19761	.30690	.65572	.12361
#1	2265.7	5759.8	48171.	4391.4
#2	2273.8	5767.2	47816.	4388.3
#3	2273.0	5793.5	47545.	4380.9

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/23/2016 10:39:28 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0146	-.0003	.0007	.0005	.0097	.0003	.0003
Stddev	.0002	.0125	.0001	.0001	.0001	.0037	.0001	.0002
%RSD	118.6	85.23	24.74	10.50	17.49	38.04	49.38	87.95
#1	-.0003	.0049	-.0003	.0007	.0004	.0054	.0004	.0005
#2	-.0004	.0103	-.0004	.0007	.0006	.0114	.0003	.0001
#3	.0001	.0287	-.0002	.0008	.0004	.0122	.0001	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	.0003	.0336	.0401	-.0005	.0006	F.0022	.0379
Stddev	.0001	.0003	.0058	.0092	.0221	.0001	.0008	.0125
%RSD	12.22	85.86	17.21	22.91	4427.	12.85	36.39	32.98
#1	.0006	.0006	.0402	.0299	-.0216	.0007	.0031	.0253
#2	.0005	.0001	.0313	.0477	.0224	.0006	.0022	.0503
#3	.0007	.0002	.0293	.0425	-.0024	.0005	.0015	.0382
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit							.0010	
Low Limit							-.0010	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	F-.0013	.0014	.0005	.0029	.0005	.0005	.0015
Stddev	.0002	.0008	.0001	.0002	.0002	.0002	.0001	.0001
%RSD	73.01	60.62	9.478	47.42	5.250	28.50	14.33	6.691
#1	.0004	-.0004	.0014	.0008	.0030	.0007	.0005	.0015
#2	.0003	-.0015	.0015	.0005	.0029	.0004	.0005	.0015
#3	.0001	-.0020	.0013	.0003	.0027	.0005	.0006	.0014
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit		.0010						
Low Limit		-.0010						

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/23/2016 10:39:28 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	.0001	.0006	.0002
Stddev	.0002	.0002	.0001
%RSD	159.6	34.62	72.77
#1	.0004	.0004	.0004
#2	.0000	.0008	.0002
#3	.0001	.0007	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2678.6	6081.7	50258.	4358.2
Stddev	10.9	4.8	445.	20.0
%RSD	.40619	.07841	.88642	.45992
#1	2667.4	6087.1	49899.	4335.7
#2	2689.1	6078.3	50118.	4374.1
#3	2679.4	6079.6	50756.	4364.8

Zoom In Zoom Out

Sample Name: MP30377-PS1 Acquired: 5/23/2016 10:43:39 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0445	262.3	.1339	4.033	.0581	78.85	.0580	.0624	.3762	.2934
Stddev	.0016	.8	.0034	.017	.0001	.26	.0004	.0008	.0013	.0028
%RSD	3.580	.2897	2.529	.4288	.2408	.3357	.6988	1.336	.3552	.9566
#1	.0436	262.2	.1330	4.046	.0580	78.99	.0584	.0630	.3747	.2962
#2	.0436	263.0	.1310	4.039	.0582	79.01	.0576	.0628	.3772	.2906
#3	.0463	261.5	.1376	4.013	.0582	78.54	.0582	.0614	.3768	.2934

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	212.1	12.65	13.04	1.656	.0946	14.65	.1808	2.718	.0977	.0827
Stddev	.8	.10	.12	.003	.0018	.08	.0025	.006	.0122	.0129
%RSD	.3703	.8159	.9471	.2069	1.868	.5513	1.378	.2201	12.43	15.60
#1	212.5	12.66	13.02	1.652	.0950	14.66	.1833	2.711	.0880	.0823
#2	212.6	12.75	12.93	1.657	.0961	14.56	.1783	2.720	.1113	.0959
#3	211.2	12.55	13.17	1.658	.0926	14.72	.1808	2.723	.0938	.0701

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	15.28	.1701	5.144	1.381	.1074	.1556	3.888
Stddev	.02	.0005	.016	.002	.0029	.0016	.006
%RSD	.1023	.2934	.3017	.1482	2.700	.9987	.1570
#1	15.30	.1696	5.148	1.381	.1105	.1566	3.883
#2	15.26	.1706	5.158	1.382	.1048	.1564	3.887
#3	15.28	.1702	5.127	1.378	.1068	.1538	3.895

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2567.5	6934.3	56583.	5030.1
Stddev	2.7	13.9	461.	34.8
%RSD	.10547	.20095	.81457	.69232
#1	2569.8	6950.3	57102.	4998.4
#2	2568.0	6928.3	56428.	5024.5
#3	2564.5	6924.5	56220.	5067.4

Zoom In Zoom Out

Sample Name: MP30377-SD1 Acquired: 5/23/2016 10:47:42 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 50.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0173	279.5	-.0016	4.072	.0058	79.16	.0066	.0088	.3502	.1948
Stddev	.0251	1.1	.0386	.021	.0056	.42	.0008	.0026	.0098	.0047
%RSD	145.7	.4081	2467.	.5231	96.69	.5368	11.81	29.30	2.792	2.425
#1	.0016	278.4	.0182	4.075	.0107	79.42	.0070	.0076	.3612	.1939
#2	-.0076	280.7	.0232	4.091	.0072	79.39	.0057	.0070	.3468	.2000
#3	-.0458	279.3	-.0461	4.049	-.0004	78.67	.0071	.0118	.3426	.1907

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	226.6	2.519	8.642	1.733	-.0086	5.516	.0873	2.503	-.0302	-.0430
Stddev	.3	.209	1.051	.002	.0012	.051	.0046	.026	.0231	.0860
%RSD	.1336	8.310	12.16	.1399	14.40	.9182	5.229	1.056	76.56	200.2
#1	226.3	2.615	7.629	1.732	-.0075	5.458	.0923	2.487	-.0228	-.1338
#2	226.9	2.279	8.568	1.731	-.0100	5.538	.0834	2.488	-.0116	.0373
#3	226.7	2.663	9.728	1.736	-.0084	5.552	.0864	2.533	-.0560	-.0324

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	18.10	.1274	5.446	1.483	-.0177	.1186	4.254
Stddev	.06	.0013	.005	.004	.0179	.0031	.002
%RSD	.3501	1.050	.0879	.3055	101.2	2.591	.0370
#1	18.14	.1265	5.449	1.486	-.0127	.1150	4.255
#2	18.03	.1289	5.447	1.477	-.0375	.1205	4.252
#3	18.13	.1268	5.440	1.484	-.0028	.1202	4.254

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2655.0	6290.0	51518.	4512.3
Stddev	2.0	2.8	77.	15.8
%RSD	.07435	.04507	.14948	.34966
#1	2655.8	6288.1	51600.	4511.0
#2	2656.4	6293.3	51448.	4497.3
#3	2652.7	6288.7	51507.	4528.7

Zoom In Zoom Out

Sample Name: FA34066-2 Acquired: 5/23/2016 10:51:47 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0013	287.9	.0283	3.238	.0095	54.32	.0024	.0080	.3097	.0475
Stddev	.0014	.7	.0024	.014	.0004	.23	.0005	.0008	.0014	.0007
%RSD	110.3	.2511	8.547	.4180	3.937	.4265	20.40	10.15	.4425	1.418
#1	-.0006	288.6	.0290	3.252	.0091	54.59	.0022	.0088	.3108	.0482
#2	-.0029	287.2	.0256	3.236	.0095	54.17	.0030	.0072	.3082	.0474
#3	-.0003	287.9	.0302	3.226	.0098	54.20	.0021	.0079	.3102	.0469

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	89.28	1.808	7.233	.6704	-.0009	5.198	.0804	.4862	-.0090	.0005
Stddev	.40	.167	.099	.0019	.0009	.060	.0016	.0038	.0072	.0094
%RSD	.4517	9.229	1.366	.2876	102.3	1.148	2.049	.7918	79.87	1742.
#1	89.74	1.662	7.152	.6721	.0000	5.259	.0802	.4838	-.0008	-.0033
#2	89.05	1.990	7.203	.6706	-.0019	5.140	.0789	.4907	-.0117	.0112
#3	89.04	1.772	7.343	.6683	-.0009	5.193	.0822	.4842	-.0144	-.0063

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	12.55	.0264	5.396	1.476	-.0037	.1119	.3499
Stddev	.03	.0012	.023	.005	.0051	.0007	.0005
%RSD	.2253	4.557	.4345	.3082	136.7	.6141	.1471
#1	12.58	.0267	5.423	1.481	-.0003	.1126	.3503
#2	12.53	.0251	5.386	1.477	-.0095	.1119	.3502
#3	12.53	.0274	5.379	1.471	-.0013	.1112	.3493

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2593.2	7084.0	57974.	5190.6
Stddev	3.3	19.4	302.	44.2
%RSD	.12747	.27377	.52023	.85118
#1	2596.0	7075.6	57632.	5178.9
#2	2589.6	7070.2	58199.	5239.5
#3	2594.0	7106.2	58093.	5153.5

Zoom In Zoom Out

Sample Name: FA34066-5 Acquired: 5/23/2016 10:55:50 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0006	93.07	.0155	1.034	.0030	924.3	.0037	.0058	.1402	.0627
Stddev	.0003	.34	.0001	.005	.0002	8.5	.0001	.0001	.0013	.0002
%RSD	53.56	.3676	.3879	.4517	6.271	.9184	2.499	1.346	.9326	.3747
#1	.0008	93.31	.0155	1.039	.0032	922.8	.0036	.0057	.1395	.0626
#2	.0002	93.22	.0156	1.034	.0030	916.7	.0037	.0057	.1417	.0630
#3	.0007	92.67	.0155	1.030	.0028	933.5	.0038	.0059	.1394	.0626

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	38.02	2.933	10.01	.4772	.0003	2.242	.0401	.6773	-.0015	-.0025
Stddev	.11	.037	.06	.0007	.0001	.013	.0003	.0016	.0011	.0028
%RSD	.2907	1.267	.6352	.1422	20.69	.5630	.6894	.2392	71.86	111.7
#1	38.15	2.960	9.948	.4765	.0003	2.235	.0398	.6791	-.0019	-.0016
#2	37.97	2.947	10.07	.4778	.0003	2.257	.0400	.6770	-.0023	-.0002
#3	37.94	2.890	10.02	.4774	.0004	2.235	.0404	.6759	-.0003	-.0056

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	8.522	.0255	2.082	1.087	-.0060	.0896	.7985
Stddev	.007	.0004	.010	.002	.0014	.0003	.0015
%RSD	.0841	1.471	.4909	.1862	23.42	.3504	.1849
#1	8.520	.0259	2.092	1.085	-.0059	.0892	.7976
#2	8.516	.0256	2.081	1.089	-.0074	.0899	.7977
#3	8.530	.0252	2.072	1.086	-.0046	.0897	.8002

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2204.8	6945.8	54837.	5239.9
Stddev	.9	12.3	214.	37.1
%RSD	.03930	.17681	.38989	.70877
#1	2203.8	6950.1	54962.	5277.9
#2	2205.1	6955.4	54959.	5203.7
#3	2205.5	6932.0	54590.	5238.2

Zoom In Zoom Out

Sample Name: FA34066-8 Acquired: 5/23/2016 11:00:01 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0029	275.8	.0262	3.180	.0098	33.00	.0013	.0059	.3025	.0142
Stddev	.0005	.3	.0038	.007	.0007	.08	.0010	.0005	.0034	.0011
%RSD	18.30	.1089	14.62	.2336	6.763	.2565	74.64	9.052	1.132	7.816
#1	-.0034	275.5	.0250	3.182	.0104	32.91	.0019	.0059	.3059	.0150
#2	-.0023	276.1	.0305	3.187	.0091	33.04	.0018	.0053	.3026	.0147
#3	-.0031	276.0	.0231	3.172	.0098	33.07	.0002	.0064	.2990	.0129

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	85.27	2.759	6.410	.8001	-.0021	6.332	.0709	.2182	-.0061	-.0082
Stddev	.20	.193	.203	.0025	.0003	.024	.0010	.0068	.0060	.0021
%RSD	.2301	6.998	3.161	.3137	14.06	.3773	1.467	3.115	97.67	24.90
#1	85.07	2.540	6.412	.7992	-.0024	6.314	.0708	.2104	-.0067	-.0103
#2	85.46	2.835	6.206	.7981	-.0019	6.359	.0699	.2232	-.0117	-.0062
#3	85.29	2.903	6.611	.8029	-.0019	6.323	.0719	.2210	.0001	-.0082

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	11.04	.0235	5.379	1.369	-.0056	.1055	.2274
Stddev	.01	.0018	.011	.004	.0069	.0014	.0007
%RSD	.1202	7.542	.2047	.3025	122.9	1.286	.3275
#1	11.04	.0235	5.382	1.365	-.0091	.1041	.2267
#2	11.02	.0217	5.389	1.367	.0023	.1067	.2273
#3	11.05	.0252	5.367	1.373	-.0100	.1058	.2282

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2587.6	7160.9	58189.	5159.9
Stddev	8.5	5.5	468.	42.0
%RSD	.32800	.07653	.80510	.81442
#1	2597.0	7167.2	57977.	5164.0
#2	2580.6	7158.0	58726.	5199.7
#3	2585.2	7157.5	57863.	5115.9

Zoom In Zoom Out

Sample Name: FA34066-9 Acquired: 5/23/2016 11:04:05 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0012	392.6	.0441	4.625	.0136	636.3	.0065	.0115	.4656	1.837
Stddev	.0033	.3	.0029	.013	.0006	.6	.0006	.0002	.0038	.008
%RSD	280.0	.0658	6.465	.2853	4.174	.1013	9.416	1.979	.8062	.4511
#1	-.0024	392.8	.0474	4.640	.0135	636.9	.0058	.0113	.4640	1.843
#2	.0017	392.3	.0425	4.615	.0141	635.6	.0067	.0114	.4699	1.827
#3	.0042	392.6	.0425	4.620	.0130	636.4	.0070	.0117	.4629	1.840

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	125.1	3.497	13.14	2.666	-.0035	6.612	.1170	1.411	.0007	-.0096
Stddev	.5	.158	.08	.002	.0007	.032	.0009	.002	.0017	.0064
%RSD	.3880	4.506	.6453	.0864	20.16	.4846	.7697	.1300	238.0	66.99
#1	125.1	3.324	13.17	2.668	-.0034	6.648	.1172	1.409	.0019	-.0168
#2	124.6	3.634	13.04	2.664	-.0028	6.602	.1160	1.413	.0015	-.0044
#3	125.6	3.531	13.20	2.664	-.0042	6.586	.1177	1.411	-.0012	-.0075

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	15.75	.0819	7.908	1.808	.0041	.1695	4.825
Stddev	.01	.0016	.021	.003	.0069	.0009	.005
%RSD	.0529	1.998	.2721	.1461	169.1	.5103	.1006
#1	15.74	.0821	7.933	1.808	-.0031	.1705	4.823
#2	15.76	.0802	7.894	1.806	.0047	.1688	4.821
#3	15.74	.0835	7.897	1.811	.0108	.1692	4.830

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2462.1	7448.6	60171.	5460.2
Stddev	6.1	9.9	265.	44.5
%RSD	.24871	.13239	.44079	.81502
#1	2457.7	7451.5	60015.	5511.3
#2	2469.1	7456.7	60021.	5439.1
#3	2459.6	7437.6	60477.	5430.1

Zoom In Zoom Out

Sample Name: FA34066-10 Acquired: 5/23/2016 11:08:09 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0031	295.5	.0302	3.224	.0094	95.28	.0013	.0081	.3176	.0182
Stddev	.0057	.4	.0065	.009	.0008	.36	.0003	.0001	.0019	.0020
%RSD	182.2	.1354	21.38	.2655	8.939	.3830	26.85	.8666	.5893	11.21
#1	.0022	295.9	.0238	3.233	.0086	95.39	.0014	.0080	.3176	.0170
#2	-.0024	295.1	.0302	3.220	.0093	94.88	.0015	.0082	.3157	.0171
#3	-.0092	295.4	.0367	3.217	.0102	95.58	.0009	.0081	.3194	.0206

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	84.76	2.449	7.385	.7084	-.0036	5.924	.0824	.2005	-.0054	-.0048
Stddev	.23	.052	.242	.0003	.0004	.016	.0018	.0075	.0048	.0037
%RSD	.2761	2.126	3.272	.0358	12.45	.2635	2.167	3.735	88.84	76.97
#1	85.03	2.396	7.235	.7084	-.0041	5.906	.0827	.2064	-.0106	-.0087
#2	84.66	2.500	7.256	.7081	-.0033	5.935	.0840	.2031	-.0042	-.0016
#3	84.60	2.451	7.664	.7087	-.0033	5.931	.0805	.1921	-.0013	-.0040

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	11.69	.0195	5.731	1.413	-.0015	.1139	.1836
Stddev	.01	.0006	.008	.004	.0019	.0004	.0007
%RSD	.0570	3.205	.1385	.2574	131.8	.3222	.3903
#1	11.69	.0203	5.734	1.412	-.0037	.1141	.1829
#2	11.68	.0193	5.722	1.410	.0000	.1141	.1843
#3	11.69	.0191	5.737	1.417	-.0007	.1135	.1836

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2575.7	7169.8	58457.	5233.4
Stddev	9.7	17.5	58.	52.9
%RSD	.37660	.24418	.09862	1.0100
#1	2586.1	7170.1	58523.	5178.3
#2	2566.8	7152.1	58423.	5283.6
#3	2574.2	7187.1	58423.	5238.2

Zoom In Zoom Out

Sample Name: FA34066-11 Acquired: 5/23/2016 11:12:14 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	156.6	.0149	1.572	.0051	25.40	.0003	.0063	.1618	.0073
Stddev	.0004	.2	.0024	.002	.0003	.02	.0003	.0002	.0007	.0008
%RSD	6999.	.1582	16.25	.0943	6.198	.0785	96.36	3.399	.4493	10.41
#1	-.0003	156.5	.0177	1.571	.0049	25.38	.0002	.0065	.1613	.0072
#2	-.0002	156.5	.0139	1.571	.0049	25.41	.0007	.0061	.1615	.0081
#3	.0004	156.9	.0131	1.573	.0054	25.42	.0001	.0064	.1627	.0066

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	51.08	1.189	4.288	.3673	-.0014	2.334	.0474	.0888	-.0062	.0006
Stddev	.06	.127	.060	.0005	.0004	.040	.0003	.0028	.0012	.0054
%RSD	.1184	10.63	1.395	.1229	28.86	1.699	.6604	3.117	19.96	910.7
#1	51.12	1.281	4.243	.3668	-.0018	2.328	.0472	.0856	-.0048	.0058
#2	51.01	1.242	4.356	.3677	-.0010	2.376	.0472	.0901	-.0070	.0009
#3	51.11	1.045	4.265	.3674	-.0015	2.297	.0478	.0907	-.0068	-.0049

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	6.370	.0098	2.757	.8941	-.0025	.0611	.0839
Stddev	.010	.0006	.002	.0004	.0035	.0009	.0002
%RSD	.1615	6.569	.0597	.0490	139.2	1.412	.2802
#1	6.359	.0093	2.756	.8943	-.0019	.0621	.0838
#2	6.371	.0105	2.755	.8943	-.0064	.0606	.0841
#3	6.379	.0095	2.759	.8935	.0007	.0606	.0837

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2574.8	7120.5	57301.	5072.7
Stddev	1.8	9.9	249.	45.4
%RSD	.06938	.13935	.43521	.89552
#1	2573.3	7122.4	57483.	5098.0
#2	2576.8	7109.7	57017.	5099.9
#3	2574.5	7129.3	57404.	5020.3

Zoom In Zoom Out

Sample Name: FA34066-12 Acquired: 5/23/2016 11:16:18 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0020	229.3	.0233	2.195	.0066	144.0	.0017	.0070	.2315	.0992
Stddev	.0010	.4	.0015	.004	.0001	.3	.0002	.0002	.0026	.0019
%RSD	49.43	.1644	6.566	.1993	.8189	.1753	12.88	2.750	1.129	1.913
#1	-.0009	229.7	.0232	2.193	.0065	144.3	.0016	.0069	.2338	.0990
#2	-.0024	229.0	.0219	2.192	.0066	143.8	.0015	.0072	.2287	.1012
#3	-.0027	229.2	.0249	2.200	.0066	144.0	.0019	.0069	.2321	.0974

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	70.82	3.418	8.396	.7862	-.0016	2.487	.0736	.6171	-.0066	.0033
Stddev	.01	.081	.115	.0012	.0005	.042	.0005	.0023	.0046	.0007
%RSD	.0200	2.378	1.366	.1556	31.64	1.698	.7114	.3681	69.90	20.71
#1	70.80	3.511	8.510	.7876	-.0013	2.534	.0730	.6160	-.0109	.0026
#2	70.83	3.362	8.398	.7857	-.0022	2.472	.0740	.6156	-.0071	.0032
#3	70.83	3.380	8.280	.7853	-.0013	2.454	.0737	.6197	-.0018	.0040

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	12.50	.0757	3.856	1.391	-.0027	.0882	.5669
Stddev	.04	.0004	.004	.002	.0034	.0006	.0012
%RSD	.3509	.5070	.1033	.1705	122.9	.6567	.2038
#1	12.46	.0757	3.855	1.393	-.0024	.0884	.5659
#2	12.50	.0753	3.852	1.388	.0004	.0887	.5667
#3	12.55	.0761	3.860	1.390	-.0063	.0876	.5682

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2515.7	7229.0	58646.	5311.8
Stddev	1.4	9.6	158.	46.0
%RSD	.05565	.13319	.26857	.86592
#1	2515.6	7239.8	58482.	5259.8
#2	2514.3	7225.5	58660.	5347.4
#3	2517.1	7221.5	58796.	5328.1

Zoom In Zoom Out

Sample Name: FA34066-13 Acquired: 5/23/2016 11:20:20 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	196.1	.0224	1.800	.0053	46.94	.0000	.0061	.1928	.0171
Stddev	.0002	.3	.0033	.005	.0000	.07	.000	.0003	.0012	.0010
%RSD	472.4	.1424	14.74	.2906	.6663	.1412	490.8	5.061	.6113	6.026
#1	.0000	195.8	.0205	1.806	.0053	46.88	.0001	.0059	.1921	.0161
#2	-.0003	196.2	.0263	1.796	.0054	47.01	-.0002	.0065	.1921	.0169
#3	.0002	196.4	.0206	1.798	.0054	46.92	.0000	.0060	.1941	.0182

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	60.57	2.220	5.972	.4235	-.0005	1.888	.0615	.1273	-.0047	-.0030
Stddev	.11	.101	.071	.0004	.0002	.008	.0008	.0054	.0025	.0043
%RSD	.1851	4.548	1.193	.0871	33.48	.4453	1.290	4.216	51.79	142.2
#1	60.46	2.231	5.914	.4239	-.0003	1.890	.0617	.1308	-.0075	.0005
#2	60.57	2.315	5.951	.4231	-.0004	1.894	.0621	.1212	-.0028	-.0079
#3	60.69	2.114	6.051	.4235	-.0006	1.878	.0606	.1300	-.0040	-.0018

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	11.19	.0203	3.312	1.246	-.0009	.0772	.1158
Stddev	.01	.0009	.004	.002	.0027	.0017	.0004
%RSD	.1019	4.528	.1161	.1709	279.7	2.207	.3792
#1	11.20	.0209	3.317	1.248	-.0038	.0760	.1162
#2	11.18	.0207	3.309	1.244	-.0005	.0764	.1154
#3	11.18	.0192	3.312	1.246	.0014	.0792	.1159

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2561.0	7112.1	58147.	5202.2
Stddev	7.7	13.1	86.	53.0
%RSD	.30056	.18447	.14775	1.0184
#1	2554.0	7097.1	58050.	5260.6
#2	2569.3	7121.5	58214.	5188.8
#3	2559.8	7117.6	58177.	5157.2

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/23/2016 11:24:24 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2546	40.30	1.985	2.052	2.061	40.36	2.046	2.038	2.087	2.045
Stddev	.0003	.06	.005	.002	.003	.09	.002	.002	.005	.008
%RSD	.1270	.1478	.2316	.1166	.1405	.2157	.0911	.0761	.2615	.3858
#1	.2549	40.37	1.980	2.050	2.059	40.43	2.045	2.037	2.092	2.048
#2	.2543	40.25	1.984	2.052	2.059	40.26	2.045	2.038	2.081	2.037
#3	.2545	40.29	1.989	2.055	2.064	40.37	2.048	2.040	2.087	2.051
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	42.94	41.57	40.82	2.084	2.031	42.17	2.014	2.027	1.994	1.990
Stddev	.12	.09	.16	.005	.007	.11	.003	.004	.004	.005
%RSD	.2837	.2067	.3814	.2196	.3252	.2657	.1431	.2001	.2056	.2499
#1	42.86	41.62	40.90	2.089	2.024	42.24	2.012	2.030	1.991	1.988
#2	42.89	41.47	40.64	2.084	2.032	42.04	2.013	2.028	1.993	1.985
#3	43.08	41.62	40.92	2.080	2.038	42.23	2.017	2.022	1.999	1.995
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.062	2.002	2.090	2.103	2.051	2.027	2.040
Stddev	.006	.002	.005	.002	.007	.005	.002
%RSD	.2948	.0924	.2387	.1053	.3367	.2406	.0721
#1	2.056	2.002	2.089	2.106	2.053	2.033	2.041
#2	2.061	2.001	2.085	2.102	2.056	2.024	2.038
#3	2.068	2.005	2.095	2.103	2.043	2.025	2.040
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/23/2016 11:24:24 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2290.6	5876.6	47936.	4382.4
Stddev	7.7	4.9	104.	39.6
%RSD	.33512	.08352	.21777	.90371
#1	2284.2	5871.1	47829.	4346.1
#2	2288.5	5880.6	47942.	4424.7
#3	2299.1	5878.0	48037.	4376.5

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/23/2016 11:28:20 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0249	-.0002	.0007	.0004	.0090	.0002	.0002	.0005
Stddev	.0001	.0114	.0004	.0001	.0001	.0033	.0001	.0001	.0002
%RSD	99.47	45.59	160.4	11.43	24.17	37.00	46.86	30.73	35.38
#1	.0001	.0225	-.0006	.0007	.0005	.0118	.0003	.0002	.0004
#2	.0000	.0373	.0002	.0006	.0003	.0053	.0002	.0002	.0004
#3	.0002	.0150	-.0003	.0008	.0005	.0098	.0001	.0001	.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0298	-.0071	.0274	.0003	F.0021	.0304	.0001	-.0009
Stddev	.0002	.0072	.0471	.0214	.0000	.0008	.0093	.0001	.0005
%RSD	104.4	24.07	659.5	78.24	13.02	35.56	30.54	108.8	49.54
#1	.0003	.0374	.0022	.0363	.0004	.0029	.0348	.0000	-.0004
#2	.0003	.0285	.0346	.0029	.0003	.0020	.0367	.0002	-.0013
#3	.0000	.0233	-.0582	.0429	.0003	.0014	.0198	.0000	-.0012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0014	.0002	.0030	.0008	.0005	.0012	-.0004	.0005	.0002
Stddev	.0001	.0022	.0005	.0002	.0001	.0002	.0007	.0002	.0001
%RSD	8.901	918.0	17.31	23.09	11.30	18.16	189.3	47.61	37.56
#1	.0015	.0021	.0034	.0009	.0005	.0014	.0003	.0007	.0002
#2	.0013	.0009	.0030	.0008	.0005	.0012	-.0011	.0006	.0002
#3	.0014	-.0022	.0024	.0006	.0004	.0010	-.0003	.0002	.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/23/2016 11:28:20 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2653.5	5997.9	49814.	4347.1
Stddev	7.9	7.6	115.	38.3
%RSD	.29760	.12594	.23060	.88110
#1	2644.6	5992.9	49859.	4351.8
#2	2656.5	6006.5	49683.	4382.9
#3	2659.5	5994.2	49899.	4306.7

Zoom In Zoom Out

Sample Name: FA34062-1 Acquired: 5/23/2016 11:32:30 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0004	202.2	.0224	1.709	.0052	93.67	.0003	.0061	.1886	.0238
Stddev	.0009	.6	.0009	.008	.0001	.45	.0001	.0004	.0004	.0005
%RSD	245.5	.3169	4.188	.4451	1.776	.4842	22.72	6.567	.2039	2.070
#1	-.0013	202.9	.0214	1.717	.0053	94.18	.0003	.0059	.1885	.0243
#2	.0006	201.7	.0227	1.703	.0052	93.29	.0002	.0059	.1890	.0233
#3	-.0004	202.0	.0231	1.706	.0052	93.56	.0004	.0066	.1883	.0238

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	60.38	1.950	6.967	.6486	.0009	1.461	.0658	.1362	.0024	-.0006
Stddev	.34	.153	.101	.0010	.0006	.027	.0010	.0033	.0022	.0031
%RSD	.5623	7.861	1.447	.1529	68.76	1.836	1.487	2.460	89.71	484.1
#1	60.73	1.899	6.873	.6486	.0016	1.435	.0669	.1332	.0032	.0005
#2	60.05	2.123	6.955	.6496	.0008	1.459	.0650	.1398	.0000	-.0041
#3	60.38	1.829	7.073	.6476	.0004	1.489	.0656	.1356	.0042	.0017

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	12.00	.0227	3.015	1.317	.0000	.0804	.1571
Stddev	.01	.0001	.009	.001	.0029	.0005	.0006
%RSD	.0550	.4267	.2925	.0618	6803.	.6191	.3531
#1	12.00	.0227	3.025	1.317	-.0011	.0806	.1572
#2	11.99	.0228	3.010	1.317	-.0021	.0799	.1565
#3	12.00	.0226	3.010	1.316	.0033	.0808	.1576

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2535.6	6982.6	57577.	5149.6
Stddev	4.1	9.2	231.	30.5
%RSD	.16347	.13136	.40066	.59302
#1	2538.4	6987.2	57651.	5114.8
#2	2537.6	6988.6	57319.	5172.0
#3	2530.8	6972.1	57762.	5162.1

Zoom In Zoom Out

Sample Name: SPIKE TEST Acquired: 5/23/2016 11:36:33 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0299	.1204	.1086	.1106	.1078	.1177	.1111	.1133	.1132	.1128
Stddev	.0004	.0064	.0003	.0001	.0003	.0022	.0001	.0002	.0003	.0004
%RSD	1.319	5.300	.3084	.1156	.2857	1.832	.0832	.2130	.2661	.3377
#1	.0302	.1186	.1083	.1108	.1081	.1170	.1110	.1130	.1135	.1131
#2	.0301	.1151	.1090	.1106	.1078	.1160	.1111	.1133	.1132	.1123
#3	.0295	.1274	.1085	.1105	.1075	.1201	.1112	.1135	.1129	.1129

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.1121	.0824	.1224	.1158	.1030	.1328	.1107	.1040	.1050	.1033
Stddev	.0012	.0244	.0098	.0003	.0001	.0057	.0002	.0006	.0009	.0013
%RSD	1.056	29.64	8.017	.2271	.1323	4.328	.1623	.5909	.8893	1.252
#1	.1125	.1101	.1238	.1155	.1031	.1394	.1105	.1035	.1048	.1034
#2	.1131	.0640	.1314	.1161	.1028	.1302	.1108	.1038	.1060	.1020
#3	.1108	.0730	.1120	.1157	.1030	.1289	.1107	.1047	.1041	.1046

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0177	.1083	.1048	.1052	.1078	.1020	.1234
Stddev	.0002	.0005	.0001	.0001	.0002	.0003	.0002
%RSD	1.289	.4176	.1252	.1145	.1927	.2627	.1816
#1	.0179	.1086	.1047	.1050	.1077	.1017	.1234
#2	.0174	.1084	.1050	.1052	.1076	.1022	.1232
#3	.0177	.1078	.1049	.1052	.1080	.1020	.1236

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2660.0	6088.5	50424.	4421.5
Stddev	5.9	10.8	57.	29.1
%RSD	.22133	.17721	.11267	.65797
#1	2661.3	6085.2	50382.	4392.7
#2	2665.2	6100.6	50489.	4421.0
#3	2653.6	6079.8	50402.	4450.9

Zoom In Zoom Out

Sample Name: MP30382-MB1 Acquired: 5/23/2016 11:40:36 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	-.0006	-.0007	.0001	.0001	.0125	-.0001	-.0001	-.0001	-.0002
Stddev	.000	.0186	.0002	.0001	.0001	.0039	.0001	.0000	.0001	.0000
%RSD	284.4	2913.	32.50	121.8	142.5	30.89	100.6	16.26	64.93	11.56
#1	.0001	-.0192	-.0008	.0000	.0000	.0169	.0000	-.0001	-.0002	-.0002
#2	.0000	-.0009	-.0005	.0002	.0002	.0098	-.0001	-.0001	.0000	-.0002
#3	-.0002	.0181	-.0009	.0001	.0000	.0107	-.0001	-.0001	-.0001	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0014	-.0362	.0088	.0000	-.0001	.0098	-.0002	-.0010	.0006	-.0001
Stddev	.0002	.0251	.0225	.0000	.0001	.0076	.0000	.0005	.0001	.0020
%RSD	12.75	69.23	255.4	52.14	94.43	77.47	9.671	48.23	24.14	1422.
#1	-.0012	-.0614	.0308	.0001	-.0001	.0175	-.0002	-.0010	.0005	-.0025
#2	-.0015	-.0361	-.0141	.0000	-.0002	.0024	-.0002	-.0005	.0007	.0009
#3	-.0016	-.0112	.0097	.0000	.0000	.0094	-.0002	-.0014	.0006	.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0136	-.0001	.0001	-.0001	-.0007	.0000	.0000
Stddev	.0000	.0002	.0000	.0000	.0007	.000	.000
%RSD	.2167	195.1	24.52	50.16	95.58	803.5	97.96
#1	.0136	-.0003	.0001	-.0001	-.0014	-.0002	-.0001
#2	.0136	.0001	.0001	.0000	.0000	.0000	.0000
#3	.0136	-.0002	.0001	-.0001	-.0008	.0002	.0000
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP30382-MB1 Acquired: 5/23/2016 11:40:36 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2711.2	6129.8	51190.	4124.4
Stddev	2.8	2.1	191.	623.6
%RSD	.10334	.03477	.37346	15.120
#1	2712.8	6127.8	51411.	3407.0
#2	2712.8	6132.0	51081.	4428.9
#3	2707.9	6129.7	51079.	4537.2

Zoom In Zoom Out

Sample Name: MP30382-B1 Acquired: 5/23/2016 11:44:46 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0484	26.99	2.003	2.094	.0522	25.55	.0513	.5128	.2046	.2587
Stddev	.0001	.11	.004	.006	.0003	.07	.0002	.0006	.0004	.0010
%RSD	.1942	.3973	.2064	.3042	.5300	.2631	.3405	.1180	.1918	.3915
#1	.0485	27.09	1.999	2.100	.0525	25.61	.0511	.5123	.2046	.2592
#2	.0484	27.01	2.004	2.093	.0521	25.58	.0513	.5127	.2049	.2594
#3	.0484	26.88	2.007	2.087	.0521	25.48	.0515	.5135	.2041	.2576
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.91	25.36	25.03	.5227	.4911	25.34	.5212	.4895	.5070	2.022
Stddev	.04	.08	.08	.0012	.0010	.08	.0004	.0016	.0007	.007
%RSD	.1605	.3280	.3310	.2252	.2135	.3228	.0785	.3293	.1438	.3334
#1	25.90	25.43	25.12	.5236	.4901	25.42	.5211	.4886	.5068	2.014
#2	25.95	25.38	24.95	.5232	.4922	25.34	.5208	.4886	.5078	2.027
#3	25.87	25.27	25.03	.5214	.4910	25.26	.5216	.4914	.5064	2.023
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0231	.5128	.4900	.4954	1.995	.4771	.5118
Stddev	.0005	.0012	.0017	.0007	.004	.0018	.0006
%RSD	2.351	.2261	.3377	.1324	.2015	.3835	.1246
#1	.0224	.5120	.4912	.4955	1.994	.4783	.5125
#2	.0233	.5123	.4907	.4960	1.992	.4781	.5112
#3	.0234	.5141	.4881	.4947	2.000	.4750	.5115
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP30382-B1 Acquired: 5/23/2016 11:44:46 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2423.2	5877.6	49325.	4463.9
Stddev	6.8	10.6	30.	9.7
%RSD	.28145	.18092	.06171	.21687
#1	2415.8	5866.4	49291.	4464.3
#2	2429.3	5887.6	49333.	4473.3
#3	2424.5	5878.7	49351.	4454.0

Zoom In Zoom Out

Sample Name: FA34160-1 Acquired: 5/23/2016 11:48:42 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.6195	.0000	.0031	.0000	40.84	-.0001	-.0002	.0019	.0011
Stddev	.000	.0185	.0002	.0002	.000	.14	.0001	.0001	.0002	.0002
%RSD	1157.	2.988	3987.	4.863	272.0	.3482	59.90	31.42	9.719	16.82
#1	-.0001	.6357	-.0002	.0030	-.0001	40.95	-.0001	-.0002	.0021	.0013
#2	-.0002	.5994	.0003	.0033	-.0001	40.68	.0000	-.0001	.0019	.0011
#3	.0002	.6235	-.0001	.0030	.0001	40.89	-.0001	-.0002	.0017	.0009

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.1466	1.120	.6015	.0006	.0013	3.256	.0003	-.0004	.0023	.0011
Stddev	.0015	.017	.0333	.0000	.0001	.013	.0002	.0007	.0008	.0015
%RSD	1.035	1.517	5.543	7.503	11.38	.3998	62.38	175.4	33.04	143.8
#1	.1458	1.104	.6025	.0005	.0015	3.268	.0001	.0004	.0029	.0010
#2	.1484	1.117	.5676	.0006	.0012	3.242	.0005	-.0010	.0015	.0026
#3	.1457	1.138	.6342	.0006	.0013	3.258	.0003	-.0006	.0026	-.0004

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.932	.0003	.2085	.0189	.0008	.0085	.0062
Stddev	.005	.0003	.0011	.0001	.0006	.0002	.0001
%RSD	.2716	88.19	.5202	.5653	76.34	2.903	.8333
#1	1.937	.0006	.2094	.0190	.0014	.0088	.0062
#2	1.926	.0004	.2073	.0188	.0002	.0084	.0062
#3	1.933	.0000	.2088	.0188	.0007	.0084	.0061

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2595.5	6018.4	50752.	4562.5
Stddev	5.5	11.7	145.	25.3
%RSD	.21256	.19439	.28486	.55469
#1	2592.2	6005.0	50705.	4551.2
#2	2601.9	6023.5	50636.	4591.5
#3	2592.5	6026.7	50914.	4544.8

Zoom In Zoom Out

Sample Name: MP30382-D1 Acquired: 5/23/2016 11:52:48 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0002	.6199	.0005	.0033	.0000	40.78	-.0001	-.0001	.0021	.0009
Stddev	.0002	.0148	.0005	.0000	.000	.08	.0000	.0000	.0002	.0002
%RSD	123.1	2.386	99.87	.7731	13110.	.2036	22.89	35.38	7.971	18.10
#1	.0003	.6031	.0006	.0032	-.0001	40.84	-.0001	-.0001	.0019	.0010
#2	-.0001	.6258	.0000	.0033	.0000	40.81	-.0001	-.0001	.0020	.0007
#3	.0004	.6308	.0010	.0033	.0001	40.68	-.0001	-.0002	.0022	.0010

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.1310	1.116	.6019	.0005	.0010	3.302	.0002	-.0004	.0028	.0021
Stddev	.0006	.020	.0199	.0000	.0001	.019	.0001	.0003	.0012	.0012
%RSD	.4657	1.779	3.307	9.260	12.24	.5875	39.25	66.09	42.04	57.22
#1	.1317	1.095	.6168	.0005	.0012	3.290	.0001	-.0001	.0020	.0027
#2	.1306	1.117	.6096	.0005	.0010	3.324	.0003	-.0004	.0042	.0029
#3	.1308	1.135	.5793	.0005	.0010	3.292	.0002	-.0007	.0023	.0007

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.902	.0002	.2117	.0218	.0002	.0084	.0059
Stddev	.004	.0002	.0004	.0012	.0014	.0003	.0000
%RSD	.2185	96.69	.1754	5.519	556.8	2.995	.7825
#1	1.902	.0000	.2115	.0231	.0018	.0082	.0059
#2	1.906	.0002	.2121	.0211	-.0004	.0084	.0059
#3	1.898	.0004	.2115	.0210	-.0007	.0087	.0059

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2591.8	6074.5	50152.	4476.7
Stddev	4.6	8.7	95.	17.7
%RSD	.17766	.14258	.18982	.39630
#1	2591.9	6065.6	50219.	4460.1
#2	2596.3	6082.9	50195.	4474.6
#3	2587.1	6074.9	50043.	4495.4

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: MP30382-SD1 Acquired: 5/23/2016 11:56:56 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0008	.6354	-.0001	.0033	-.0002	40.08	-.0004	-.0003	.0025	.0001
Stddev	.0019	.0343	.0022	.0005	.0002	.06	.0001	.0003	.0009	.0011
%RSD	231.2	5.405	1629.	15.22	103.2	.1431	21.02	91.68	35.20	943.2
#1	-.0016	.6192	-.0001	.0033	-.0003	40.15	-.0005	-.0005	.0034	.0011
#2	-.0023	.6748	.0020	.0027	-.0004	40.04	-.0004	.0000	.0016	.0003
#3	.0014	.6121	-.0023	.0037	.0000	40.06	-.0003	-.0005	.0025	-.0011

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.1120	1.105	.6166	.0003	-.0009	3.397	-.0006	-.0028	-.0011	-.0059
Stddev	.0212	.053	.0772	.0002	.0007	.060	.0005	.0028	.0030	.0049
%RSD	18.90	4.826	12.52	58.73	82.11	1.754	86.45	98.20	280.9	82.46
#1	.1308	1.108	.6070	.0002	-.0009	3.466	-.0009	-.0013	.0009	-.0055
#2	.0891	1.157	.5446	.0001	-.0001	3.360	.0000	-.0061	.0004	-.0110
#3	.1159	1.050	.6981	.0004	-.0015	3.366	-.0009	-.0012	-.0045	-.0013

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.879	-.0008	.2112	.0188	-.0004	.0082	.0238
Stddev	.012	.0003	.0010	.0019	.0025	.0004	.0003
%RSD	.6542	42.29	.4772	10.04	567.0	4.928	1.374
#1	1.891	-.0011	.2104	.0209	-.0013	.0081	.0237
#2	1.867	-.0005	.2107	.0174	.0024	.0078	.0236
#3	1.880	-.0006	.2123	.0181	-.0024	.0086	.0242

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2649.3	6102.4	50083.	4417.3
Stddev	2.4	12.8	114.	17.5
%RSD	.09247	.20956	.22670	.39523
#1	2652.0	6111.7	50163.	4411.1
#2	2648.7	6107.7	50132.	4437.0
#3	2647.2	6087.8	49953.	4403.8

Zoom In Zoom Out

Sample Name: MP30382-PS1 Acquired: 5/23/2016 12:01:04 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0467	3.215	.1051	.2733	.0528	45.35	.0522	.0529	.0560	.1080
Stddev	.0003	.018	.0006	.0015	.0003	.19	.0001	.0001	.0003	.0002
%RSD	.6281	.5429	.6060	.5324	.6349	.4190	.1556	.1901	.5359	.1433
#1	.0469	3.203	.1044	.2742	.0531	45.43	.0521	.0529	.0562	.1079
#2	.0464	3.235	.1052	.2740	.0527	45.48	.0523	.0528	.0561	.1081
#3	.0469	3.207	.1057	.2716	.0525	45.13	.0523	.0530	.0556	.1081

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	3.227	11.45	5.822	.0549	.1024	13.82	.1052	.0493	.1105	.1020
Stddev	.021	.08	.006	.0001	.0001	.06	.0004	.0007	.0003	.0006
%RSD	.6469	.6861	.1004	.1289	.0918	.4545	.3574	1.349	.2739	.5692
#1	3.238	11.51	5.825	.0550	.1023	13.88	.1048	.0486	.1105	.1025
#2	3.241	11.48	5.826	.0549	.1024	13.83	.1053	.0496	.1108	.1014
#3	3.203	11.36	5.815	.0548	.1024	13.75	.1056	.0498	.1102	.1022

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.925	.0502	.2582	.1262	.1009	.0579	.2756
Stddev	.004	.0002	.0011	.0009	.0002	.0002	.0007
%RSD	.2111	.4273	.4346	.7319	.1865	.3719	.2453
#1	1.921	.0500	.2592	.1269	.1010	.0578	.2748
#2	1.929	.0501	.2585	.1265	.1011	.0582	.2761
#3	1.926	.0504	.2570	.1251	.1007	.0579	.2758

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2496.8	5985.7	49486.	4477.6
Stddev	6.0	12.6	264.	27.5
%RSD	.23897	.20985	.53440	.61465
#1	2501.9	5999.3	49583.	4463.3
#2	2490.3	5983.1	49187.	4460.1
#3	2498.4	5974.6	49689.	4509.3

Zoom In Zoom Out

Sample Name: MP30382-S1 Acquired: 5/23/2016 12:05:06 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0491	27.94	2.030	2.114	.0527	66.31	.0515	.5146	.2093	.2635
Stddev	.0003	.09	.005	.004	.0002	.22	.0001	.0010	.0003	.0010
%RSD	.5745	.3092	.2424	.1725	.3702	.3374	.2004	.1920	.1319	.3861
#1	.0488	28.00	2.026	2.118	.0528	66.54	.0514	.5138	.2092	.2632
#2	.0494	27.84	2.030	2.110	.0525	66.10	.0515	.5144	.2096	.2647
#3	.0490	27.98	2.035	2.113	.0528	66.28	.0516	.5157	.2091	.2627

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	26.09	26.76	25.64	.5284	.4952	29.00	.5216	.5000	.5132	2.042
Stddev	.09	.06	.09	.0009	.0010	.09	.0015	.0017	.0013	.004
%RSD	.3273	.2358	.3380	.1632	.1928	.3240	.2820	.3438	.2624	.2178
#1	26.14	26.83	25.63	.5274	.4945	29.08	.5206	.4985	.5133	2.038
#2	25.99	26.73	25.55	.5287	.4949	28.90	.5209	.4997	.5119	2.040
#3	26.13	26.71	25.73	.5290	.4963	29.01	.5233	.5019	.5145	2.047

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.945	.5115	.7058	.5213	2.029	.4937	.5187
Stddev	.004	.0016	.0015	.0006	.009	.0007	.0007
%RSD	.1849	.3043	.2071	.1164	.4592	.1351	.1358
#1	1.948	.5099	.7074	.5220	2.026	.4929	.5180
#2	1.941	.5115	.7045	.5211	2.022	.4939	.5188
#3	1.946	.5130	.7055	.5208	2.040	.4941	.5194

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2385.6	5905.0	49336.	4516.8
Stddev	8.7	10.5	203.	36.1
%RSD	.36480	.17816	.41246	.79839
#1	2392.8	5914.7	49425.	4520.0
#2	2388.0	5906.5	49103.	4551.1
#3	2375.9	5893.8	49479.	4479.2

Zoom In Zoom Out

Sample Name: MP30382-S2 Acquired: 5/23/2016 12:09:02 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0499	28.10	2.041	2.147	.0531	66.86	.0518	.5176	.2107	.2651
Stddev	.0003	.10	.003	.005	.0004	.16	.0001	.0010	.0005	.0007
%RSD	.6730	.3391	.1245	.2552	.8031	.2386	.1763	.1890	.2358	.2725
#1	.0501	28.05	2.038	2.145	.0532	66.74	.0518	.5167	.2112	.2648
#2	.0495	28.21	2.042	2.153	.0535	67.04	.0518	.5175	.2102	.2660
#3	.0500	28.04	2.042	2.142	.0527	66.80	.0519	.5187	.2107	.2646

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	26.44	27.03	25.82	.5346	.4983	29.07	.5236	.5031	.5167	2.052
Stddev	.10	.08	.06	.0006	.0010	.09	.0006	.0029	.0006	.003
%RSD	.3599	.2856	.2242	.1080	.2007	.3047	.1123	.5673	.1075	.1302
#1	26.34	26.96	25.77	.5339	.4972	29.06	.5230	.4998	.5172	2.053
#2	26.53	27.11	25.88	.5349	.4985	29.16	.5239	.5044	.5168	2.054
#3	26.46	27.00	25.81	.5349	.4991	28.99	.5241	.5051	.5161	2.049

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.946	.5136	.7129	.5291	2.047	.4960	.5214
Stddev	.003	.0011	.0022	.0017	.010	.0009	.0011
%RSD	.1306	.2150	.3085	.3286	.4963	.1863	.2033
#1	1.944	.5143	.7127	.5276	2.036	.4968	.5205
#2	1.949	.5142	.7152	.5310	2.053	.4962	.5212
#3	1.946	.5123	.7108	.5287	2.054	.4950	.5225

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2381.1	5905.6	48766.	4453.7
Stddev	7.3	7.4	206.	31.0
%RSD	.30720	.12448	.42291	.69651
#1	2389.3	5905.6	48734.	4480.7
#2	2378.7	5912.9	48987.	4460.5
#3	2375.3	5898.2	48578.	4419.8

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/23/2016 12:12:59 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2566	41.12	2.043	2.086	2.063	41.16	2.077	2.070	2.066	2.056
Stddev	.0006	.18	.002	.013	.010	.13	.004	.003	.004	.004
%RSD	.2314	.4295	.0956	.5976	.4930	.3175	.1756	.1582	.1785	.2116
#1	.2570	40.94	2.044	2.075	2.052	41.01	2.075	2.069	2.062	2.059
#2	.2569	41.15	2.041	2.083	2.064	41.25	2.074	2.067	2.070	2.051
#3	.2559	41.29	2.045	2.099	2.072	41.23	2.081	2.073	2.067	2.058
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	43.07	41.86	41.37	2.097	2.068	41.85	2.061	2.042	2.045	2.046
Stddev	.25	.20	.10	.003	.005	.21	.004	.006	.004	.004
%RSD	.5852	.4805	.2374	.1554	.2675	.4969	.1834	.3190	.2153	.2030
#1	42.83	41.66	41.26	2.098	2.063	41.63	2.060	2.037	2.042	2.044
#2	43.06	41.85	41.38	2.100	2.067	41.87	2.058	2.040	2.043	2.042
#3	43.33	42.06	41.46	2.093	2.074	42.05	2.065	2.050	2.050	2.050
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.117	2.070	2.089	2.105	2.067	2.054	2.070
Stddev	.004	.003	.010	.002	.010	.005	.004
%RSD	.1926	.1267	.4654	.1136	.4774	.2522	.2179
#1	2.114	2.069	2.080	2.107	2.057	2.049	2.068
#2	2.114	2.067	2.088	2.106	2.066	2.059	2.066
#3	2.122	2.072	2.099	2.102	2.077	2.053	2.075
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/23/2016 12:12:59 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2272.5	5784.7	48029.	4393.8
Stddev	8.7	14.4	198.	14.6
%RSD	.38474	.24916	.41312	.33208
#1	2279.3	5792.5	48166.	4410.3
#2	2275.7	5793.6	47802.	4382.6
#3	2262.6	5768.1	48120.	4388.6

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/23/2016 12:16:56 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0152	.0001	.0006	.0005	.0060	.0002	.0002	.0002
Stddev	.0001	.0101	.0002	.0000	.0001	.0017	.0001	.0001	.0004
%RSD	54.97	66.35	123.1	8.545	30.10	28.05	44.76	58.16	178.7
#1	-.0002	.0046	.0001	.0006	.0003	.0079	.0003	.0003	.0006
#2	-.0003	.0247	.0000	.0005	.0005	.0054	.0001	.0002	.0003
#3	-.0001	.0165	.0004	.0006	.0006	.0047	.0001	.0001	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0319	.0245	.0111	.0005	F.0021	.0336	.0001	.0002
Stddev	.0002	.0087	.0319	.0134	.0001	.0008	.0092	.0000	.0005
%RSD	65.18	27.34	129.9	121.2	23.45	35.95	27.26	41.74	199.1
#1	.0004	.0416	.0454	.0134	.0006	.0030	.0251	.0001	.0004
#2	.0002	.0292	-.0122	.0232	.0005	.0020	.0325	.0001	-.0003
#3	.0001	.0248	.0404	-.0034	.0003	.0014	.0433	.0001	.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F.0021	.0001	.0038	.0004	.0005	.0014	.0000	.0004	.0001
Stddev	.0015	.0012	.0005	.0002	.0001	.0002	.0005	.0002	.0001
%RSD	70.60	790.3	14.34	43.84	26.83	10.95	1436.	40.39	39.96
#1	.0037	-.0001	.0041	.0007	.0003	.0016	.0004	.0005	.0002
#2	.0018	-.0009	.0032	.0004	.0005	.0013	-.0005	.0006	.0001
#3	.0008	.0014	.0041	.0003	.0006	.0013	.0002	.0002	.0001
Check ?	Chk Fail	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.0020								
Low Limit	-.0020								

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/23/2016 12:16:56 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2667.5	6036.1	50325.	4418.1
Stddev	2.6	19.3	237.	41.7
%RSD	.09782	.31938	.47022	.94431
#1	2665.7	6047.3	50351.	4371.2
#2	2670.5	6047.3	50077.	4432.1
#3	2666.3	6013.9	50548.	4451.1

Zoom In Zoom Out

Sample Name: FA34160-2 Acquired: 5/23/2016 12:21:06 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.2527	.0002	.0192	.0001	29.26	.0000	-.0001	.0012	.0025
Stddev	.000	.0066	.0004	.0001	.0001	.03	.000	.0000	.0001	.0002
%RSD	583.0	2.616	177.1	.6835	113.6	.0960	279.1	42.58	6.151	6.430
#1	-.0001	.2453	.0001	.0190	.0000	29.29	.0000	-.0001	.0011	.0027
#2	-.0001	.2579	-.0001	.0193	.0001	29.24	-.0001	.0000	.0013	.0024
#3	.0001	.2549	.0006	.0192	.0001	29.26	.0000	-.0001	.0013	.0024

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0119	1.824	.5264	.0003	.0032	13.07	.0002	-.0005	.0047	-.0004
Stddev	.0009	.021	.0276	.0000	.0001	.01	.0002	.0004	.0007	.0003
%RSD	7.260	1.126	5.243	5.074	3.371	.0712	70.96	83.45	14.11	65.36
#1	.0125	1.844	.5510	.0003	.0033	13.08	.0001	-.0009	.0047	-.0001
#2	.0109	1.803	.5315	.0003	.0031	13.06	.0002	-.0001	.0040	-.0007
#3	.0122	1.825	.4966	.0003	.0031	13.06	.0004	-.0004	.0054	-.0005

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.614	.0005	.1521	.0024	-.0003	.0034	.0077
Stddev	.004	.0002	.0002	.0003	.0004	.0002	.0001
%RSD	.2805	29.99	.1243	10.42	130.2	6.987	1.041
#1	1.609	.0006	.1522	.0022	-.0006	.0032	.0078
#2	1.615	.0006	.1522	.0027	-.0003	.0036	.0076
#3	1.618	.0003	.1519	.0023	.0001	.0035	.0077

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2575.1	5939.8	50740.	4583.9
Stddev	3.2	14.8	35.	25.6
%RSD	.12599	.24967	.06901	.55759
#1	2572.4	5942.9	50755.	4595.7
#2	2578.7	5952.9	50700.	4601.5
#3	2574.1	5923.7	50766.	4554.6

Zoom In Zoom Out

Sample Name: FA34160-3 Acquired: 5/23/2016 12:25:14 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0003	.2659	.0000	.0081	.0000	34.19	-.0001	-.0001	.0014	.0008
Stddev	.0004	.0074	.001	.0001	.0000	.06	.0000	.0001	.0003	.0003
%RSD	121.9	2.773	1707.	1.277	81.47	.1622	29.93	70.82	24.55	36.58
#1	-.0008	.2666	.0000	.0081	.0000	34.25	-.0001	-.0002	.0012	.0006
#2	-.0001	.2728	.0005	.0082	.0000	34.17	-.0001	.0000	.0017	.0012
#3	-.0001	.2581	-.0006	.0080	.0001	34.14	-.0001	-.0001	.0011	.0008

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0183	2.655	.8293	.0005	.0025	4.344	.0000	-.0009	.0018	.0010
Stddev	.0005	.021	.0201	.0000	.0001	.013	.0001	.0003	.0004	.0008
%RSD	2.499	.8077	2.420	1.804	4.118	.3056	970.6	39.62	25.50	84.62
#1	.0182	2.630	.8525	.0005	.0024	4.359	-.0001	-.0010	.0018	.0019
#2	.0188	2.662	.8184	.0005	.0026	4.334	.0000	-.0011	.0013	.0003
#3	.0179	2.671	.8170	.0005	.0025	4.338	.0001	-.0005	.0022	.0007

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.337	.0001	.1907	.0032	.0002	.0079	.0060
Stddev	.003	.0003	.0003	.0005	.0005	.0002	.0001
%RSD	.2357	236.0	.1800	15.12	203.5	2.938	1.344
#1	1.338	.0004	.1911	.0037	-.0003	.0076	.0060
#2	1.334	.0001	.1905	.0030	.0007	.0079	.0060
#3	1.340	-.0002	.1904	.0028	.0003	.0081	.0059

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2595.7	5935.3	50597.	4528.5
Stddev	3.6	2.7	187.	46.5
%RSD	.13857	.04528	.36876	1.0265
#1	2599.1	5938.0	50434.	4477.6
#2	2591.9	5935.3	50801.	4568.8
#3	2596.2	5932.6	50557.	4538.9

Zoom In Zoom Out

Sample Name: FA34160-1F Acquired: 5/23/2016 12:29:21 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	.1237	.0001	.0026	.0000	40.20	-.0001	-.0001	.0007	.0010
Stddev	.0005	.0108	.0003	.0001	.0001	.06	.0000	.0001	.0002	.0002
%RSD	724.5	8.693	274.0	5.064	430.4	.1490	24.73	69.51	22.33	19.54
#1	-.0004	.1254	-.0002	.0025	.0001	40.23	-.0001	-.0002	.0007	.0011
#2	-.0002	.1335	.0002	.0028	.0000	40.23	-.0001	-.0001	.0009	.0010
#3	.0005	.1122	.0004	.0025	-.0001	40.13	-.0001	-.0001	.0006	.0008

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	-.0062	1.121	.5777	.0002	.0010	3.217	.0000	-.0008	.0021	.0005
Stddev	.0023	.030	.0112	.0000	.0000	.011	.000	.0005	.0002	.0026
%RSD	36.53	2.659	1.938	22.11	4.741	.3319	779.1	59.63	7.449	477.7
#1	-.0047	1.143	.5708	.0002	.0009	3.216	.0000	-.0013	.0022	.0019
#2	-.0051	1.132	.5906	.0002	.0010	3.228	.0000	-.0008	.0020	.0022
#3	-.0088	1.087	.5716	.0002	.0010	3.207	-.0001	-.0003	.0020	-.0024

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.702	.0003	.1958	.0010	-.0002	.0074	.0078
Stddev	.001	.0001	.0004	.0000	.0008	.0003	.0000
%RSD	.0805	35.13	.1968	1.515	318.3	4.024	.0315
#1	1.702	.0002	.1960	.0010	-.0011	.0076	.0078
#2	1.704	.0005	.1960	.0010	.0004	.0077	.0078
#3	1.701	.0003	.1953	.0010	.0000	.0071	.0078

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2581.7	5940.8	50413.	4485.7
Stddev	3.6	18.2	186.	30.5
%RSD	.13941	.30683	.36877	.68103
#1	2578.8	5922.2	50602.	4520.8
#2	2585.8	5958.7	50406.	4465.1
#3	2580.6	5941.5	50230.	4471.1

Zoom In Zoom Out

Sample Name: FA34160-2F Acquired: 5/23/2016 12:33:27 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	.2012	.0004	.0199	.0000	29.69	-.0001	-.0001	.0011	.0028
Stddev	.0003	.0052	.0002	.0002	.0000	.13	.0000	.0001	.0004	.0003
%RSD	532.7	2.566	56.41	.9716	261.9	.4312	19.70	115.6	33.53	10.59
#1	-.0003	.2052	.0006	.0200	.0000	29.81	-.0001	.0000	.0007	.0031
#2	.0001	.1953	.0004	.0200	.0001	29.56	-.0001	-.0001	.0014	.0025
#3	.0004	.2030	.0002	.0197	.0000	29.70	-.0001	-.0002	.0012	.0028

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	-.0042	1.927	.5480	.0002	.0027	13.85	.0001	-.0005	.0037	.0005
Stddev	.0027	.019	.0220	.0000	.0002	.05	.0001	.0004	.0004	.0017
%RSD	63.63	.9704	4.011	11.04	6.978	.3727	99.45	78.46	10.36	349.6
#1	-.0070	1.917	.5240	.0002	.0027	13.91	.0000	-.0001	.0036	-.0013
#2	-.0039	1.915	.5672	.0002	.0026	13.82	.0002	-.0006	.0034	.0021
#3	-.0017	1.948	.5528	.0002	.0029	13.82	.0001	-.0009	.0042	.0007

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.608	.0001	.1520	.0009	-.0008	.0034	.0098
Stddev	.001	.0002	.0005	.0000	.0008	.0002	.0000
%RSD	.0683	132.2	.3123	3.807	102.7	6.801	.4285
#1	1.607	.0002	.1526	.0009	-.0006	.0032	.0098
#2	1.608	.0002	.1517	.0009	-.0017	.0033	.0098
#3	1.609	-.0001	.1518	.0009	-.0001	.0036	.0098

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2565.7	6004.7	50034.	4472.6
Stddev	4.4	2.1	67.	41.7
%RSD	.17228	.03501	.13309	.93261
#1	2567.2	6004.8	50010.	4481.9
#2	2569.1	6006.8	50109.	4508.9
#3	2560.7	6002.6	49983.	4427.1

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: FA34160-3F Acquired: 5/23/2016 12:37:35 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0002	.1876	.0003	.0077	.0000	31.97	-.0001	-.0001	.0007	.0005
Stddev	.0005	.0148	.0004	.0001	.000	.14	.0000	.0001	.0004	.0001
%RSD	198.4	7.902	140.8	1.486	263.6	.4224	17.33	77.42	53.19	23.61
#1	-.0007	.2046	.0006	.0076	.0000	32.13	-.0001	-.0002	.0008	.0007
#2	.0002	.1810	-.0002	.0077	.0000	31.89	-.0001	-.0002	.0009	.0004
#3	-.0002	.1773	.0005	.0078	.0000	31.90	-.0001	.0000	.0003	.0006

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	-.0045	2.455	.8232	.0005	.0019	4.248	-.0001	-.0004	.0021	.0000
Stddev	.0007	.051	.0048	.0000	.0001	.034	.0001	.0000	.0005	.001
%RSD	16.37	2.081	.5825	3.636	2.782	.7934	125.2	10.97	23.93	8081.
#1	-.0037	2.514	.8200	.0005	.0019	4.286	-.0001	-.0004	.0022	-.0014
#2	-.0045	2.427	.8287	.0004	.0020	4.222	-.0001	-.0005	.0025	.0012
#3	-.0052	2.425	.8209	.0005	.0019	4.236	.0000	-.0004	.0015	.0002

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	1.210	.0000	.1822	.0008	.0004	.0075	.0077
Stddev	.002	.0003	.0008	.0001	.0008	.0002	.0001
%RSD	.1215	1405.	.4322	7.645	207.3	2.914	.8456
#1	1.209	.0002	.1830	.0008	.0012	.0075	.0077
#2	1.209	.0002	.1815	.0007	-.0004	.0077	.0076
#3	1.212	-.0003	.1819	.0007	.0003	.0073	.0076

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2589.6	6046.6	49736.	4460.1
Stddev	3.6	12.9	49.	79.4
%RSD	.13928	.21340	.09850	1.7795
#1	2592.7	6056.4	49736.	4370.0
#2	2590.4	6051.5	49687.	4519.6
#3	2585.6	6032.0	49785.	4490.7

Zoom In Zoom Out

Sample Name: FA34145-3 Acquired: 5/23/2016 12:41:42 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	2.185	.0000	.1284	.0001	45.08	-.0001	.0001	.0054	.0021
Stddev	.0002	.013	.0010	.0001	.0001	.08	.0000	.0000	.0003	.0002
%RSD	600.4	.5914	3513.	.0496	54.55	.1770	17.70	31.81	4.883	9.798
#1	.0002	2.170	.0012	.1284	.0000	45.10	-.0001	.0001	.0052	.0019
#2	-.0002	2.194	-.0004	.1283	.0002	45.15	-.0001	.0002	.0054	.0023
#3	.0001	2.190	-.0006	.1284	.0001	44.99	-.0001	.0001	.0057	.0022

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	1.591	2.264	1.096	.0141	.0040	9.849	.0041	.0008	.0006	.0000
Stddev	.007	.013	.004	.0000	.0001	.013	.0003	.0004	.0006	.0002
%RSD	.4654	.5617	.3499	.0990	3.715	.1301	7.245	45.57	105.2	570.7
#1	1.591	2.271	1.097	.0141	.0041	9.842	.0044	.0012	.0002	-.0002
#2	1.583	2.250	1.099	.0141	.0038	9.864	.0041	.0005	.0003	.0001
#3	1.598	2.272	1.091	.0141	.0040	9.841	.0038	.0008	.0013	.0003

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	2.121	.0002	.4137	.1358	-.0001	.0027	.0015
Stddev	.007	.0001	.0003	.0031	.0002	.0001	.0000
%RSD	.3551	37.15	.0781	2.258	350.4	3.953	2.295
#1	2.129	.0002	.4135	.1331	.0001	.0026	.0015
#2	2.114	.0002	.4141	.1391	.0000	.0027	.0015
#3	2.119	.0001	.4136	.1351	-.0003	.0028	.0015

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2540.6	6071.9	49485.	4422.1
Stddev	3.1	11.4	194.	44.4
%RSD	.12118	.18844	.39291	1.0044
#1	2543.3	6077.2	49316.	4423.4
#2	2541.2	6058.8	49697.	4377.0
#3	2537.2	6079.8	49441.	4465.8

Zoom In Zoom Out

Sample Name: FA34145-4 Acquired: 5/23/2016 12:45:50 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0003	.6491	.0017	.0271	.0000	70.52	-.0001	.0000	.0043	.0003
Stddev	.0003	.0172	.0010	.0002	.0001	.14	.0000	.000	.0003	.0002
%RSD	107.3	2.649	56.67	.6422	243.9	.2032	17.24	180.4	7.361	53.96
#1	-.0006	.6404	.0013	.0272	.0001	70.53	-.0001	.0000	.0046	.0005
#2	.0000	.6689	.0010	.0272	.0000	70.66	-.0001	.0000	.0040	.0002
#3	-.0002	.6379	.0028	.0269	.0000	70.37	-.0001	.0000	.0042	.0003

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	4.306	5.692	2.776	.0085	.0018	52.40	.0066	.0001	-.0007	.0007
Stddev	.017	.041	.007	.0000	.0001	.05	.0001	.0006	.0009	.0009
%RSD	.3827	.7270	.2376	.2874	3.367	.0946	1.935	447.0	129.0	124.3
#1	4.292	5.674	2.768	.0085	.0018	52.45	.0065	.0001	.0003	.0015
#2	4.324	5.663	2.780	.0085	.0018	52.40	.0067	.0007	-.0011	-.0002
#3	4.303	5.740	2.779	.0085	.0019	52.35	.0065	-.0004	-.0014	.0008

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	1.260	.0000	.4900	.0440	-.0001	.0064	.0006
Stddev	.002	.0001	.0008	.0005	.0007	.0004	.0001
%RSD	.1483	1174.	.1676	1.228	666.5	6.128	11.54
#1	1.258	.0001	.4907	.0445	.0006	.0060	.0006
#2	1.262	.0000	.4903	.0435	-.0009	.0068	.0006
#3	1.260	-.0001	.4891	.0439	-.0001	.0064	.0007

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2428.2	5914.3	48132.	4404.1
Stddev	4.2	7.4	194.	11.9
%RSD	.17191	.12470	.40265	.26919
#1	2432.6	5922.8	47963.	4397.4
#2	2424.2	5909.6	48090.	4417.8
#3	2427.8	5910.5	48344.	4397.1

Zoom In Zoom Out

Sample Name: FA34103-1 Acquired: 5/23/2016 12:49:58 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0004	.1090	.0035	.0412	.0000	86.89	-.0002	-.0001	.0023
Stddev	.0005	.0051	.0001	.0001	.0001	.09	.0000	.0001	.0002
%RSD	121.2	4.693	3.767	.2803	2544.	.0994	19.90	65.70	7.163
#1	.0002	.1044	.0037	.0411	.0000	86.82	-.0002	-.0001	.0022
#2	-.0007	.1082	.0035	.0413	.0001	86.98	-.0002	.0000	.0025
#3	-.0006	.1145	.0034	.0413	.0000	86.87	-.0001	-.0001	.0023

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)
Avg	.0033	.1016	5.456	16.49	.0542	.0258	F250.3	.0023	-.0010
Stddev	.0003	.0018	.026	.03	.0002	.0001	2.7	.0000	.0006
%RSD	7.939	1.818	.4742	.1593	.3331	.2032	1.085	.4166	63.58
#1	.0033	.1037	5.427	16.48	.0540	.0257	253.3	.0023	-.0004
#2	.0030	.1007	5.463	16.51	.0541	.0258	249.8	.0023	-.0008
#3	.0035	.1003	5.477	16.46	.0543	.0258	248.0	.0024	-.0016

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	.0015	.0052	4.498	-.0003	.6320	.0024	-.0006	.0045	.0082
Stddev	.0014	.0013	.002	.0001	.0013	.0001	.0004	.0002	.0001
%RSD	95.28	24.33	.0498	46.60	.2017	5.363	68.93	4.650	.6635
#1	.0001	.0062	4.496	-.0004	.6318	.0024	-.0010	.0047	.0082
#2	.0029	.0056	4.501	-.0001	.6308	.0025	-.0006	.0043	.0083
#3	.0015	.0038	4.498	-.0003	.6333	.0022	-.0002	.0044	.0083

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2264.5	5679.0	45576.	4373.6
Stddev	1.0	10.4	93.	41.7
%RSD	.04524	.18236	.20351	.95310
#1	2264.4	5676.6	45681.	4384.9
#2	2263.6	5670.1	45539.	4327.4
#3	2265.6	5690.4	45507.	4408.5

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: FA34103-2 Acquired: 5/23/2016 12:54:12 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0004	.0643	.0106	.0180	.0001	433.9	-.0005	.0003	.0023
Stddev	.0002	.0004	.0003	.0001	.0001	3.3	.0000	.0001	.0003
%RSD	63.20	.6647	2.898	.3484	110.6	.7587	.7475	29.58	13.45
#1	-.0001	.0647	.0102	.0180	.0000	437.5	-.0005	.0002	.0020
#2	-.0004	.0644	.0106	.0180	.0001	433.2	-.0005	.0004	.0024
#3	-.0006	.0639	.0108	.0179	.0001	431.0	-.0005	.0003	.0026

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0000	1.213	20.80	117.3	1.974	.0010	F916.9	.0044	.0001
Stddev	.000	.002	.03	.1	.002	.0000	33.5	.0001	.0011
%RSD	3788.	.1875	.1380	.0740	.1199	2.925	3.654	1.792	1027.
#1	.0000	1.216	20.81	117.2	1.975	.0010	943.7	.0045	-.0012
#2	.0001	1.211	20.77	117.3	1.972	.0011	927.7	.0043	.0005
#3	-.0002	1.213	20.83	117.4	1.976	.0010	879.3	.0044	.0010

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0015	.0001	9.855	-.0007	F4.094	.0003	-.0025	.0038	.0132
Stddev	.0009	.0012	.009	.0001	.112	.0003	.0001	.0003	.0000
%RSD	57.25	935.3	.0882	11.68	2.728	94.64	5.515	7.788	.3463
#1	.0008	.0013	9.865	-.0007	4.047	.0005	-.0024	.0037	.0132
#2	.0025	.0002	9.852	-.0006	4.221	.0000	-.0025	.0041	.0132
#3	.0012	-.0011	9.849	-.0006	4.013	.0004	-.0027	.0036	.0131

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1846.7	5025.0	39711.	4219.1
Stddev	.7	10.7	226.	27.0
%RSD	.03716	.21302	.56908	.63928
#1	1846.9	5017.1	39684.	4246.5
#2	1847.2	5037.2	39949.	4192.6
#3	1845.9	5020.7	39499.	4218.3

Zoom In Zoom Out

Sample Name: FA34103-3 Acquired: 5/23/2016 12:58:44 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0011	.1485	.1605	.2733	-.0001	157.2	-.0004	.0434	.0739
Stddev	.0000	.0052	.0011	.0008	.0000	.6	.0000	.0001	.0007
%RSD	3.782	3.509	.6626	.3058	55.71	.4023	5.793	.1430	.8885
#1	.0010	.1498	.1605	.2743	-.0001	157.8	-.0004	.0433	.0744
#2	.0011	.1529	.1615	.2727	.0000	157.1	-.0004	.0433	.0741
#3	.0011	.1427	.1594	.2729	-.0001	156.5	-.0005	.0434	.0732

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0071	2.319	F969.6	47.79	1.634	F4.145	F703.0	.2738	.0001
Stddev	.0001	.008	26.5	.27	.001	.005	17.8	.0004	.0006
%RSD	1.145	.3525	2.733	.5711	.0882	.1296	2.534	.1420	541.5
#1	.0071	2.327	997.2	48.00	1.635	4.140	722.4	.2735	.0008
#2	.0071	2.311	967.1	47.88	1.632	4.144	699.3	.2737	.0001
#3	.0072	2.317	944.4	47.48	1.634	4.151	687.3	.2743	-.0005

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0231	.1038	11.51	.0018	2.928	.0205	-.0043	.2158	.0198
Stddev	.0004	.0018	.04	.0003	.007	.0001	.0012	.0005	.0001
%RSD	1.564	1.755	.3083	15.62	.2392	.4753	26.96	.2389	.3073
#1	.0227	.1058	11.48	.0015	2.928	.0205	-.0048	.2163	.0198
#2	.0235	.1022	11.52	.0020	2.935	.0205	-.0030	.2156	.0198
#3	.0232	.1034	11.55	.0017	2.921	.0207	-.0052	.2153	.0199

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1484.4	4540.6	35087.	4141.5
Stddev	3.9	3.0	47.	38.5
%RSD	.25957	.06521	.13402	.92856
#1	1485.6	4538.9	35034.	4106.3
#2	1487.5	4544.0	35123.	4135.5
#3	1480.1	4538.9	35105.	4182.5

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/23/2016 13:03:07 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2583	40.83	1.995	2.081	2.108	40.71	2.072	2.065	2.153	2.095
Stddev	.0011	.12	.006	.005	.004	.07	.001	.002	.004	.004
%RSD	.4315	.2885	.2845	.2235	.2082	.1651	.0671	.1054	.1789	.1790
#1	.2571	40.70	1.989	2.077	2.103	40.64	2.070	2.063	2.150	2.091
#2	.2593	40.86	1.996	2.082	2.110	40.74	2.073	2.067	2.152	2.097
#3	.2585	40.93	2.000	2.086	2.111	40.77	2.073	2.066	2.158	2.098
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	43.69	41.47	41.65	2.123	2.060	36.72	2.028	2.056	2.016	1.998
Stddev	.18	.15	.06	.005	.005	.32	.003	.003	.003	.004
%RSD	.4229	.3689	.1403	.2189	.2571	.8671	.1318	.1568	.1596	.2032
#1	43.59	41.38	41.64	2.118	2.054	36.58	2.025	2.053	2.014	1.994
#2	43.58	41.39	41.59	2.128	2.061	36.50	2.029	2.058	2.015	2.002
#3	43.91	41.65	41.71	2.123	2.065	37.08	2.030	2.059	2.020	1.998
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.231	2.005	2.149	2.151	2.085	2.062	2.061
Stddev	.014	.004	.004	.005	.003	.002	.001
%RSD	.6219	.1883	.2071	.2412	.1613	.1144	.0516
#1	2.246	2.001	2.143	2.145	2.081	2.062	2.059
#2	2.226	2.005	2.151	2.156	2.085	2.060	2.061
#3	2.220	2.008	2.151	2.151	2.088	2.065	2.061
Check ? Value Range	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/23/2016 13:03:07 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2269.2	5849.3	47125.	4249.8
Stddev	3.1	8.0	49.	50.6
%RSD	.13708	.13594	.10458	1.1895
#1	2272.8	5858.4	47128.	4275.6
#2	2267.2	5845.8	47074.	4282.2
#3	2267.6	5843.7	47172.	4191.5

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/23/2016 13:07:03 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0005	.0087	.0003	.0002	.0002	.0019	.0000	.0001
Stddev	.0001	.0159	.0005	.0001	.0000	.0022	.0000	.0000
%RSD	15.17	181.9	185.5	25.37	14.35	115.5	36.93	39.43
#1	-.0005	.0016	.0007	.0002	.0002	.0026	.0000	.0000
#2	-.0005	.0269	-.0003	.0002	.0001	-.0006	.0000	.0001
#3	-.0006	-.0024	.0004	.0003	.0002	.0036	.0000	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0000	.0299	.2000	.0329	.0002	F.0036	.4996
Stddev	.0003	.000	.0088	.0325	.0108	.0000	.0009	.0203
%RSD	358.9	243.3	29.42	16.24	32.78	14.63	24.67	4.054
#1	.0003	.0001	.0399	.2297	.0256	.0002	.0045	.5164
#2	-.0003	-.0001	.0265	.2050	.0279	.0002	.0033	.5052
#3	.0002	-.0001	.0233	.1653	.0453	.0001	.0028	.4771
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit							.0010	
Low Limit							-.0010	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	F-.0013	.0015	-.0008	.0280	.0006	.0002	.0015
Stddev	.000	.0010	.0011	.0010	.0025	.0002	.0001	.0001
%RSD	495.4	80.30	75.52	131.2	8.972	30.98	48.71	8.822
#1	.0001	-.0001	.0022	-.0007	.0305	.0007	.0003	.0016
#2	-.0002	-.0017	.0020	.0002	.0281	.0006	.0002	.0014
#3	.0000	-.0019	.0002	-.0018	.0255	.0004	.0001	.0014
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit		.0010						
Low Limit		-.0010						

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/23/2016 13:07:03 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	.0001	.0001	.0000
Stddev	.0004	.0001	.0000
%RSD	503.2	140.4	3166.
#1	.0005	.0000	.0000
#2	-.0002	.0001	.0000
#3	-.0001	.0001	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2658.1	6089.8	49714.	4341.7
Stddev	4.0	9.3	104.	50.6
%RSD	.15094	.15214	.20927	1.1665
#1	2654.8	6079.1	49803.	4283.2
#2	2657.0	6095.6	49739.	4370.8
#3	2662.6	6094.7	49600.	4371.0

Zoom In Zoom Out

Sample Name: ICV Acquired: 5/23/2016 13:35:20 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2474	41.67	2.037	2.102	2.082	42.55	2.055	2.076	2.057	2.026
Stddev	.0006	.03	.004	.006	.000	.03	.001	.001	.003	.004
%RSD	.2317	.0838	.1866	.2666	.0174	.0795	.0640	.0391	.1545	.2088
#1	.2472	41.69	2.036	2.102	2.082	42.51	2.056	2.077	2.061	2.029
#2	.2480	41.69	2.042	2.096	2.082	42.58	2.054	2.076	2.055	2.027
#3	.2469	41.63	2.034	2.108	2.082	42.55	2.056	2.075	2.056	2.021
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.79	42.33	42.90	2.097	1.912	43.14	2.088	2.041	2.053	2.074
Stddev	.13	.08	.07	.002	.003	.04	.001	.007	.003	.003
%RSD	.3114	.1887	.1535	.0732	.1390	.1028	.0600	.3491	.1568	.1594
#1	40.79	42.27	42.89	2.097	1.910	43.11	2.089	2.042	2.052	2.072
#2	40.67	42.30	42.85	2.099	1.911	43.11	2.087	2.033	2.056	2.073
#3	40.92	42.42	42.97	2.096	1.915	43.19	2.089	2.047	2.050	2.078
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0687	2.052	1.951	1.959	2.118	1.909	2.078
Stddev	.0002	.003	.003	.002	.005	.003	.002
%RSD	.2819	.1249	.1436	.1085	.2616	.1787	.1050
#1	.0689	2.049	1.951	1.958	2.124	1.910	2.077
#2	.0686	2.053	1.948	1.962	2.113	1.905	2.077
#3	.0686	2.054	1.953	1.958	2.118	1.911	2.081
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: ICV Acquired: 5/23/2016 13:35:20 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2254.1	5751.4	47084.	4343.7
Stddev	8.7	15.2	114.	14.4
%RSD	.38595	.26373	.24187	.33111
#1	2256.6	5762.7	46999.	4359.7
#2	2261.3	5757.2	47213.	4339.6
#3	2244.4	5734.1	47039.	4331.8

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/23/2016 13:40:15 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2493	39.97	1.998	2.002	1.989	40.20	2.006	2.000	1.974	1.972
Stddev	.0002	.08	.003	.006	.006	.08	.000	.001	.004	.004
%RSD	.0784	.2056	.1487	.3076	.3063	.2030	.0209	.0328	.1854	.2116
#1	.2492	39.88	1.996	1.995	1.983	40.11	2.007	2.001	1.975	1.975
#2	.2492	40.03	1.997	2.007	1.995	40.25	2.006	2.001	1.976	1.967
#3	.2496	40.01	2.002	2.003	1.991	40.24	2.006	2.000	1.969	1.973
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.67	40.09	40.00	2.016	2.028	40.37	2.012	1.965	1.994	2.004
Stddev	.15	.14	.19	.000	.003	.15	.002	.004	.002	.002
%RSD	.3583	.3403	.4651	.0101	.1254	.3660	.0831	.1939	.1168	.0930
#1	41.53	39.93	39.79	2.016	2.025	40.20	2.010	1.969	1.992	2.003
#2	41.82	40.17	40.14	2.017	2.028	40.48	2.014	1.963	1.996	2.002
#3	41.67	40.17	40.08	2.016	2.030	40.42	2.013	1.962	1.996	2.006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.215	2.059	2.037	2.049	1.982	2.020	2.004
Stddev	.001	.001	.005	.001	.003	.002	.003
%RSD	.0574	.0496	.2486	.0348	.1435	.0820	.1247
#1	2.214	2.058	2.031	2.049	1.985	2.021	2.005
#2	2.214	2.058	2.041	2.048	1.982	2.021	2.005
#3	2.216	2.060	2.038	2.049	1.980	2.018	2.001
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/23/2016 13:40:15 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2271.2	5786.5	47482.	4314.0
Stddev	6.1	8.7	107.	12.0
%RSD	.27075	.15024	.22615	.27705
#1	2265.1	5780.1	47461.	4326.6
#2	2271.3	5783.0	47386.	4312.4
#3	2277.4	5796.4	47598.	4302.9

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/23/2016 13:46:37 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	-.0004	.0005	.0001	.0002	.0032	.0003	.0001	.0002
Stddev	.0003	.0067	.0006	.0001	.0001	.0013	.0001	.0001	.0002
%RSD	489.4	1600.	131.7	69.24	47.34	41.55	27.31	168.1	89.88
#1	.0000	.0052	.0007	.0001	.0003	.0032	.0003	.0002	.0003
#2	-.0004	.0014	-.0002	.0000	.0001	.0018	.0003	.0000	.0003
#3	.0002	-.0079	.0010	.0002	.0003	.0045	.0002	.0000	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005	.0194	-.0942	.0224	.0003	F.0012	-.2143	.0002	.0000
Stddev	.0002	.0040	.0225	.0081	.0000	.0002	.0035	.0002	.000
%RSD	33.79	20.69	23.86	36.21	12.26	18.74	1.652	73.32	3145.
#1	.0004	.0234	-.1168	.0300	.0003	.0014	-.2103	.0004	-.0005
#2	.0003	.0195	-.0940	.0234	.0002	.0013	-.2170	.0002	.0002
#3	.0006	.0154	-.0718	.0139	.0003	.0010	-.2156	.0001	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0015	-.0018	-.0074	.0008	.0002	.0012	.0007	.0002	.0002
Stddev	.0003	.0018	.0000	.0002	.0000	.0002	.0009	.0001	.0000
%RSD	17.42	102.0	.3200	26.06	16.95	18.51	137.4	70.85	17.84
#1	.0016	.0003	-.0074	.0011	.0002	.0014	.0000	.0003	.0003
#2	.0012	-.0031	-.0075	.0008	.0002	.0011	.0002	.0001	.0002
#3	.0018	-.0025	-.0074	.0006	.0002	.0010	.0017	.0001	.0002
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/23/2016 13:46:37 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2655.4	6013.4	49580.	4374.8
Stddev	5.8	6.7	61.	61.4
%RSD	.21907	.11157	.12321	1.4027
#1	2653.7	6014.6	49558.	4306.7
#2	2661.9	6019.4	49532.	4425.9
#3	2650.6	6006.2	49649.	4391.6

Zoom In Zoom Out

Sample Name: FA34095-1 Acquired: 5/23/2016 13:50:33 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0035	1.119	-.0095	.0171	.0008	45.96	.0019	.0600	.0266	.0396
Stddev	.0026	.128	.0011	.0016	.0007	.22	.0003	.0006	.0037	.0025
%RSD	76.18	11.41	11.30	9.603	90.84	.4783	14.31	.9526	13.75	6.251
#1	.0026	1.101	-.0100	.0189	.0016	46.09	.0023	.0605	.0308	.0368
#2	.0064	1.255	-.0102	.0157	.0005	46.09	.0018	.0602	.0242	.0415
#3	.0014	1.001	-.0082	.0167	.0002	45.71	.0018	.0594	.0248	.0405

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	.6192	161.7	12.29	.0250	.1543	191.5	.0711	.0342	.0083	.0120
Stddev	.0242	.4	.18	.0002	.0013	.6	.0018	.0075	.0112	.0049
%RSD	3.915	.2534	1.479	.7880	.8502	.2928	2.553	22.07	134.3	40.76
#1	.6148	162.2	12.40	.0251	.1553	192.0	.0708	.0354	.0031	.0175
#2	.6454	161.5	12.40	.0248	.1548	191.5	.0731	.0410	.0212	.0103
#3	.5975	161.5	12.08	.0252	.1528	190.9	.0695	.0261	.0007	.0081

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	721.7	-.0026	.2638	.1744	-.0079	.0053	.1438
Stddev	4.0	.0015	.0012	.0016	.0032	.0012	.0005
%RSD	.5479	57.85	.4719	.9423	40.07	23.33	.3203
#1	717.7	-.0036	.2626	.1726	-.0047	.0048	.1442
#2	721.8	-.0009	.2651	.1757	-.0111	.0045	.1433
#3	725.6	-.0034	.2636	.1750	-.0080	.0068	.1439

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2477.2	6122.9	49913.	4480.1
Stddev	7.8	8.0	244.	11.9
%RSD	.31459	.13109	.48877	.26456
#1	2485.0	6131.3	49635.	4470.5
#2	2477.0	6122.1	50014.	4476.5
#3	2469.5	6115.3	50090.	4493.4

Zoom In Zoom Out

Sample Name: FA34097-1 Acquired: 5/23/2016 13:54:43 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0002	.0614	.0069	.0161	-.0001	97.75	.0000	-.0002	.0010	.0009
Stddev	.0001	.0081	.0003	.0001	.0001	.15	.000	.0001	.0000	.0002
%RSD	44.64	13.10	4.954	.3867	104.2	.1543	201.8	54.88	1.802	19.13
#1	-.0002	.0527	.0066	.0161	-.0001	97.72	.0000	-.0001	.0011	.0008
#2	-.0003	.0686	.0067	.0161	.0000	97.62	.0000	-.0002	.0010	.0011
#3	-.0001	.0631	.0072	.0162	.0000	97.92	-.0001	-.0003	.0010	.0008

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	11.23	2.753	2.932	.1202	.0040	3.361	.0005	.0006	.0014	-.0010
Stddev	.01	.017	.021	.0006	.0002	.006	.0001	.0003	.0010	.0004
%RSD	.0945	.6084	.7114	.5159	4.332	.1898	28.30	57.69	70.49	43.79
#1	11.22	2.758	2.914	.1195	.0041	3.355	.0005	.0003	.0022	-.0014
#2	11.23	2.766	2.928	.1207	.0041	3.367	.0004	.0010	.0017	-.0005
#3	11.24	2.734	2.955	.1205	.0038	3.360	.0007	.0005	.0003	-.0010

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	8.895	.0000	.1894	.0024	.0002	.0006	.0082
Stddev	.010	.000	.0005	.0001	.0011	.0001	.0000
%RSD	.1112	346.6	.2411	2.248	672.0	24.56	.5088
#1	8.884	.0001	.1890	.0023	.0005	.0005	.0082
#2	8.897	.0000	.1895	.0023	.0011	.0005	.0083
#3	8.904	-.0002	.1899	.0024	-.0011	.0007	.0082

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2503.3	6006.9	48971.	4483.5
Stddev	3.7	4.8	247.	20.1
%RSD	.14810	.08045	.50529	.44794
#1	2500.9	6012.1	49256.	4460.4
#2	2507.6	6006.2	48840.	4496.5
#3	2501.4	6002.5	48816.	4493.6

Zoom In Zoom Out

Sample Name: FA34089-5 Acquired: 5/23/2016 13:58:49 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0004	.0058	.0000	-.0001	.0000	.0786	.0000	-.0002	.0002	.0013
Stddev	.0001	.0021	.001	.0000	.000	.0011	.0000	.0000	.0002	.0001
%RSD	29.12	35.39	11430.	53.28	116.1	1.422	812.0	18.96	75.64	9.623
#1	-.0003	.0063	-.0005	-.0001	-.0001	.0776	.0000	-.0001	.0003	.0014
#2	-.0005	.0076	.0008	.0000	.0000	.0783	.0000	-.0002	.0003	.0012
#3	-.0004	.0036	-.0003	-.0001	-.0001	.0798	.0000	-.0002	.0000	.0014

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	.0064	-.0797	.0241	.0001	-.0002	-.0786	.0000	.0000	.0006	-.0001
Stddev	.0018	.0108	.0124	.0000	.0001	.0067	.0000	.000	.0004	.0013
%RSD	28.85	13.53	51.56	35.08	58.78	8.549	463.5	2002.	58.70	922.5
#1	.0083	-.0762	.0134	.0001	-.0001	-.0712	.0000	.0003	.0008	.0003
#2	.0063	-.0711	.0212	.0001	-.0001	-.0843	.0000	.0001	.0002	-.0016
#3	.0046	-.0918	.0378	.0001	-.0003	-.0803	.0000	-.0005	.0009	.0009

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	.2457	.0002	.0002	.0001	-.0010	-.0002	.0067
Stddev	.0006	.0002	.0001	.0001	.0002	.0001	.0001
%RSD	.2543	126.1	41.82	149.1	23.97	68.39	.8307
#1	.2457	.0001	.0001	.0000	-.0012	-.0001	.0067
#2	.2464	.0000	.0001	.0000	-.0009	-.0002	.0067
#3	.2451	.0004	.0002	.0001	-.0008	-.0004	.0068

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2706.9	6176.6	50811.	4439.7
Stddev	5.0	13.1	306.	60.5
%RSD	.18538	.21285	.60198	1.3637
#1	2712.7	6176.3	50665.	4370.7
#2	2704.4	6190.0	50605.	4483.8
#3	2703.7	6163.7	51162.	4464.7

Zoom In Zoom Out

Sample Name: FA34089-6 Acquired: 5/23/2016 14:03:00 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0003	.0726	-.0003	.0638	-.0001	174.2	.0000	-.0002	.0017	.0011
Stddev	.0001	.0090	.0001	.0006	.0001	.9	.000	.0000	.0009	.0001
%RSD	31.44	12.34	51.59	.8756	175.1	.5345	135.2	25.30	49.53	8.866
#1	-.0005	.0690	-.0001	.0644	-.0001	175.3	.0000	-.0002	.0027	.0010
#2	-.0003	.0828	-.0003	.0635	-.0002	173.6	-.0001	-.0002	.0013	.0012
#3	-.0003	.0659	-.0004	.0635	.0001	173.7	.0000	-.0001	.0012	.0012

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	.0684	3.129	61.63	.0225	-.0005	13.38	.0010	-.0003	.0005	.0005
Stddev	.0022	.034	.28	.0001	.0001	.06	.0002	.0003	.0010	.0010
%RSD	3.192	1.086	.4618	.3612	14.86	.4853	21.38	83.65	205.5	189.7
#1	.0705	3.168	61.92	.0226	-.0005	13.44	.0008	-.0001	-.0005	.0003
#2	.0661	3.111	61.62	.0224	-.0005	13.31	.0011	-.0006	.0005	.0016
#3	.0686	3.109	61.35	.0225	-.0006	13.39	.0012	-.0003	.0014	-.0004

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	8.394	-.0003	.6289	.0034	-.0009	.0011	.0141
Stddev	.018	.0004	.0019	.0001	.0008	.0000	.0001
%RSD	.2171	106.3	.3032	1.909	88.32	2.141	.4287
#1	8.408	-.0001	.6310	.0034	-.0010	.0011	.0141
#2	8.373	-.0002	.6273	.0033	-.0016	.0011	.0141
#3	8.400	-.0008	.6283	.0035	.0000	.0011	.0142

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2333.9	5747.7	46579.	4319.3
Stddev	5.4	8.1	89.	59.0
%RSD	.22923	.14098	.19195	1.3661
#1	2339.8	5739.9	46674.	4254.6
#2	2332.5	5756.0	46564.	4333.0
#3	2329.4	5747.1	46497.	4370.2

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: FA34107-1 Acquired: 5/23/2016 14:07:09 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0005	.0607	.0009	.1197	.0000	180.7	-.0001	-.0003	.0010	.0017
Stddev	.0003	.0304	.0002	.0009	.000	4.5	.0001	.0001	.0001	.0002
%RSD	60.33	50.06	27.46	.7713	281.4	2.483	89.55	19.84	13.57	12.33
#1	-.0009	.0883	.0009	.1197	.0000	184.1	-.0001	-.0003	.0011	.0019
#2	-.0005	.0281	.0006	.1207	-.0001	182.5	-.0001	-.0002	.0009	.0015
#3	-.0002	.0656	.0011	.1188	.0000	175.6	.0000	-.0003	.0009	.0016

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	.0594	5.918	86.39	.0060	.0016	32.72	.0002	.0003	.0011	-.0008
Stddev	.0012	.016	.47	.0000	.0001	.13	.0001	.0009	.0009	.0009
%RSD	1.974	.2753	.5422	.3635	8.147	.4068	38.71	276.1	84.13	116.3
#1	.0606	5.932	86.45	.0060	.0017	32.73	.0001	.0001	.0008	-.0011
#2	.0594	5.922	86.83	.0060	.0014	32.84	.0002	.0013	.0021	-.0014
#3	.0583	5.900	85.90	.0060	.0017	32.58	.0003	-.0004	.0004	.0002

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	10.70	-.0002	.6843	.0032	-.0008	.0022	.0096
Stddev	.01	.0001	.0034	.0001	.0004	.0000	.0000
%RSD	.1251	60.77	.4944	3.433	42.98	.6841	.1634
#1	10.71	-.0001	.6841	.0033	-.0011	.0022	.0096
#2	10.68	-.0003	.6877	.0031	-.0009	.0022	.0096
#3	10.70	-.0002	.6809	.0031	-.0004	.0022	.0096

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2298.3	5701.0	45595.	4260.6
Stddev	2.7	2.8	123.	21.4
%RSD	.11840	.04924	.26922	.50176
#1	2300.5	5699.6	45663.	4268.3
#2	2299.2	5699.2	45669.	4236.5
#3	2295.3	5704.3	45453.	4277.2

Zoom In Zoom Out

Sample Name: FA34107-2 Acquired: 5/23/2016 14:11:25 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	.0015	-.0001	.0001	-.0001	.0639	.0000	-.0001	.0000	.0002
Stddev	.0002	.0104	.0008	.0002	.0000	.0053	.000	.0001	.000	.0003
%RSD	148.6	687.9	1019.	148.3	22.48	8.230	28.28	74.96	1083.	149.8
#1	-.0003	-.0105	-.0009	-.0001	-.0002	.0585	.0000	.0000	-.0002	.0005
#2	-.0001	.0080	.0007	.0003	-.0001	.0642	.0000	-.0002	-.0002	-.0001
#3	.0000	.0070	.0000	.0001	-.0001	.0691	-.0001	-.0001	.0003	.0002

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	-.0003	-.0582	.0394	.0000	-.0004	.0060	.0000	.0000	.0001	.0000
Stddev	.0034	.0275	.0353	.0000	.0001	.0064	.0001	.001	.0010	.0009
%RSD	1142.	47.25	89.53	105.3	22.55	108.1	294.8	2555.	1088.	15590.
#1	-.0028	-.0331	.0723	.0000	-.0005	.0059	.0001	.0001	.0012	.0006
#2	.0035	-.0876	.0021	.0000	-.0003	-.0005	.0001	.0006	-.0002	.0004
#3	-.0016	-.0539	.0440	.0000	-.0003	.0124	-.0001	-.0008	-.0007	-.0010

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	.3582	.0001	.0002	-.0001	-.0011	-.0001	.0066
Stddev	.0008	.0002	.0001	.0000	.0005	.0004	.0001
%RSD	.2156	224.7	61.67	62.25	46.21	351.7	1.144
#1	.3582	.0003	.0001	-.0001	-.0013	.0002	.0065
#2	.3574	.0000	.0003	.0000	-.0005	-.0006	.0067
#3	.3589	.0000	.0001	-.0001	-.0015	.0001	.0067

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2698.9	6218.6	50611.	4349.0
Stddev	6.6	9.0	72.	19.9
%RSD	.24403	.14511	.14230	.45643
#1	2696.8	6222.6	50574.	4326.1
#2	2706.2	6224.9	50565.	4360.9
#3	2693.5	6208.3	50694.	4360.0

Zoom In Zoom Out

Sample Name: FA34107-3 Acquired: 5/23/2016 14:15:36 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0005	.0599	.0135	.2033	-.0001	250.0	-.0001	-.0002	.0010
Stddev	.0006	.0090	.0007	.0007	.0001	3.4	.0000	.0000	.0002
%RSD	122.3	14.97	4.960	.3562	106.6	1.375	27.71	18.23	23.49
#1	.0002	.0676	.0143	.2028	.0000	246.1	-.0001	-.0002	.0013
#2	-.0009	.0501	.0133	.2042	-.0002	252.4	-.0001	-.0003	.0009
#3	-.0008	.0621	.0131	.2030	-.0001	251.7	-.0001	-.0003	.0008

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)
Avg	.0034	.0912	37.60	158.9	.2805	.0065	F358.6	.0060	-.0007
Stddev	.0002	.0012	.14	1.4	.0007	.0000	2.3	.0002	.0003
%RSD	5.429	1.366	.3689	.8513	.2371	.7279	.6400	4.092	42.01
#1	.0032	.0900	37.54	157.5	.2806	.0066	360.3	.0063	-.0008
#2	.0035	.0924	37.76	160.2	.2812	.0065	356.0	.0058	-.0009
#3	.0036	.0913	37.50	159.1	.2798	.0065	359.6	.0059	-.0003

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	.0005	.0071	21.98	-.0004	.8349	.0020	-.0019	.0095	.0223
Stddev	.0009	.0002	.03	.0001	.0040	.0001	.0007	.0001	.0001
%RSD	179.1	2.358	.1492	19.56	.4815	5.862	34.77	1.469	.3931
#1	-.0005	.0073	21.96	-.0004	.8338	.0021	-.0019	.0097	.0224
#2	.0012	.0070	21.96	-.0005	.8393	.0020	-.0012	.0094	.0222
#3	.0007	.0069	22.02	-.0003	.8315	.0019	-.0025	.0095	.0224

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2090.3	5405.4	42995.	4207.8
Stddev	3.9	7.3	152.	66.8
%RSD	.18881	.13414	.35455	1.5871
#1	2087.0	5402.3	43057.	4284.9
#2	2094.6	5413.7	42821.	4168.2
#3	2089.3	5400.2	43107.	4170.4

Zoom In Zoom Out

Sample Name: FA34107-4 Acquired: 5/23/2016 14:20:00 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0004	.0409	.0132	.2060	.0000	256.3	-.0001	-.0004	.0014
Stddev	.0002	.0161	.0003	.0011	.0001	2.0	.0001	.0001	.0003
%RSD	37.08	39.35	2.056	.5142	647.7	.7924	79.40	28.77	18.58
#1	-.0006	.0442	.0132	.2064	.0000	256.5	.0000	-.0005	.0011
#2	-.0003	.0234	.0135	.2068	.0001	258.2	-.0001	-.0004	.0016
#3	-.0004	.0550	.0130	.2048	-.0001	254.1	-.0001	-.0003	.0014

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)
Avg	.0035	.0880	38.03	160.4	.2847	.0057	F346.9	.0060	-.0003
Stddev	.0001	.0041	.24	.7	.0005	.0000	5.1	.0002	.0006
%RSD	2.549	4.605	.6191	.4398	.1788	.8256	1.481	3.190	203.8
#1	.0034	.0876	38.18	160.8	.2852	.0057	348.8	.0059	-.0003
#2	.0034	.0842	38.15	160.8	.2847	.0056	350.8	.0058	.0003
#3	.0036	.0923	37.76	159.6	.2842	.0057	341.1	.0062	-.0009

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	.0010	.0071	22.10	-.0005	.8378	.0018	-.0008	.0094	.0240
Stddev	.0011	.0010	.03	.0004	.0033	.0002	.0009	.0002	.0001
%RSD	117.1	13.54	.1421	69.07	.3967	8.949	104.3	2.058	.3325
#1	.0009	.0074	22.11	-.0002	.8399	.0020	-.0018	.0096	.0240
#2	.0022	.0079	22.06	-.0009	.8396	.0017	-.0001	.0093	.0240
#3	-.0001	.0061	22.12	-.0004	.8340	.0017	-.0006	.0093	.0239

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2083.4	5385.6	42643.	4200.7
Stddev	4.3	7.1	235.	31.8
%RSD	.20739	.13197	.55047	.75798
#1	2088.0	5390.2	42373.	4186.2
#2	2082.8	5389.3	42754.	4178.7
#3	2079.4	5377.4	42802.	4237.2

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: FA34107-5 Acquired: 5/23/2016 14:24:24 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	1.279	.0017	.0975	.0000	228.3	-.0002	.0000	.0025	.0014
Stddev	.0001	.012	.0005	.0002	.0001	.7	.0000	.000	.0003	.0003
%RSD	72.43	.9126	30.81	.1804	153.0	.3031	8.122	1527.	13.38	23.12
#1	-.0001	1.268	.0011	.0973	.0000	227.8	-.0002	-.0001	.0022	.0017
#2	-.0002	1.277	.0021	.0975	.0001	228.0	-.0002	.0000	.0028	.0016
#3	-.0001	1.291	.0019	.0977	.0000	229.1	-.0002	.0001	.0026	.0010

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.8641	7.343	100.9	.0374	-.0009	51.02	.0005	.0008	.0007	.0118
Stddev	.0050	.026	.1	.0001	.0001	.12	.0001	.0005	.0003	.0009
%RSD	.5799	.3539	.0853	.2571	9.217	.2264	13.25	59.72	40.04	7.187
#1	.8683	7.367	100.9	.0375	-.0009	51.10	.0005	.0010	.0004	.0124
#2	.8586	7.315	100.9	.0374	-.0009	50.88	.0005	.0003	.0006	.0123
#3	.8655	7.345	100.8	.0373	-.0010	51.06	.0006	.0012	.0009	.0109

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	14.72	-.0002	.7649	.0508	-.0012	.0042	.0186
Stddev	.02	.0001	.0007	.0032	.0013	.0000	.0001
%RSD	.1456	79.33	.0881	6.237	106.8	.6337	.5685
#1	14.72	-.0001	.7656	.0528	-.0026	.0042	.0185
#2	14.74	-.0003	.7644	.0525	-.0005	.0042	.0187
#3	14.70	-.0001	.7646	.0472	-.0004	.0041	.0186

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2245.1	5690.0	45225.	4277.5
Stddev	9.1	29.2	246.	17.0
%RSD	.40666	.51360	.54296	.39730
#1	2254.1	5723.7	45140.	4281.1
#2	2245.3	5674.5	45501.	4292.4
#3	2235.9	5671.8	45033.	4259.0

Zoom In Zoom Out

Sample Name: MP30383-MB1 Acquired: 5/23/2016 14:28:39 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	-.0031	-.0005	.0000	-.0001	.0375	.0000	-.0001	.0003	.0000
Stddev	.0001	.0002	.0006	.000	.0000	.0009	.000	.0001	.0001	.000
%RSD	88.89	6.986	119.2	185.7	36.79	2.431	120.5	61.85	40.16	4005.
#1	.0002	-.0029	-.0001	.0000	-.0002	.0384	.0000	-.0002	.0002	.0002
#2	.0000	-.0031	-.0002	-.0001	-.0001	.0366	.0000	.0000	.0003	-.0003
#3	.0003	-.0033	-.0012	.0000	-.0002	.0374	.0000	-.0002	.0005	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0027	-.0853	.0327	.0000	-.0005	-.1647	.0000	.0002	-.0005	-.0020
Stddev	.0039	.0104	.0132	.000	.0001	.0102	.0001	.0002	.0003	.0008
%RSD	145.2	12.14	40.42	55.48	10.52	6.186	1529.	110.4	63.25	37.76
#1	.0014	-.0880	.0479	.0000	-.0005	-.1543	.0000	.0004	-.0003	-.0021
#2	-.0004	-.0738	.0250	.0000	-.0005	-.1651	.0001	.0002	-.0009	-.0027
#3	.0071	-.0940	.0251	.0000	-.0006	-.1747	-.0001	.0000	-.0004	-.0012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0044	-.0001	.0000	-.0001	-.0007	-.0001	.0000
Stddev	.0002	.0001	.000	.0000	.0010	.0003	.0000
%RSD	5.174	153.8	695.2	14.63	148.3	455.7	82.96
#1	.0047	-.0002	.0000	-.0001	.0001	-.0004	.0000
#2	.0042	.0000	.0000	-.0001	-.0018	.0001	.0001
#3	.0045	.0000	.0000	-.0002	-.0003	.0001	.0000
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP30383-MB1 Acquired: 5/23/2016 14:28:39 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2691.0	6178.4	50323.	4350.5
Stddev	.3	5.9	170.	15.8
%RSD	.01124	.09511	.33765	.36354
#1	2691.2	6174.8	50305.	4347.4
#2	2690.7	6185.2	50163.	4336.5
#3	2691.2	6175.2	50501.	4367.7

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/23/2016 14:32:50 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2500	39.50	1.958	1.998	2.016	39.70	2.003	1.993	2.027	1.989
Stddev	.0011	.17	.005	.009	.009	.14	.005	.005	.004	.006
%RSD	.4550	.4226	.2582	.4370	.4293	.3556	.2562	.2322	.2027	.3126
#1	.2489	39.41	1.952	1.993	2.010	39.64	1.997	1.987	2.026	1.982
#2	.2512	39.40	1.960	1.992	2.012	39.60	2.005	1.995	2.024	1.993
#3	.2500	39.69	1.961	2.008	2.026	39.86	2.006	1.996	2.032	1.992
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	42.11	40.47	40.05	2.030	2.005	41.53	1.979	1.981	1.961	1.961
Stddev	.08	.12	.04	.003	.008	.16	.005	.002	.008	.004
%RSD	.1813	.2882	.0934	.1282	.4032	.3939	.2450	.1075	.3857	.2057
#1	42.10	40.52	40.08	2.027	1.996	41.53	1.974	1.979	1.952	1.957
#2	42.04	40.34	40.01	2.029	2.008	41.37	1.983	1.980	1.965	1.961
#3	42.19	40.56	40.06	2.032	2.011	41.70	1.982	1.983	1.966	1.965
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.182	1.997	2.071	2.077	1.998	2.013	1.997
Stddev	.005	.006	.009	.003	.001	.004	.006
%RSD	.2429	.2789	.4335	.1226	.0595	.1984	.3077
#1	2.176	1.991	2.067	2.074	1.997	2.010	1.989
#2	2.185	2.002	2.065	2.078	1.997	2.013	2.000
#3	2.184	1.998	2.082	2.079	1.999	2.018	2.000
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/23/2016 14:32:50 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2280.9	5883.1	47231.	4267.1
Stddev	3.0	18.2	213.	52.0
%RSD	.13017	.30891	.45184	1.2178
#1	2283.4	5904.0	47252.	4211.2
#2	2281.7	5871.9	47434.	4314.0
#3	2277.6	5873.3	47008.	4276.1

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/23/2016 14:36:46 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0001	.0007	.0002	.0002	.0013	.0002	.0002	.0003
Stddev	.000	.0094	.0007	.0003	.0001	.0029	.0001	.0000	.0002
%RSD	899.6	7727.	97.95	171.2	24.99	230.3	34.41	5.598	91.42
#1	.0002	-.0100	.0012	.0002	.0002	-.0021	.0002	.0002	.0005
#2	-.0001	.0016	-.0001	-.0001	.0003	.0031	.0002	.0002	.0000
#3	-.0002	.0087	.0009	.0005	.0003	.0029	.0001	.0002	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0330	-.0885	-.0082	.0003	F.0020	-.2173	.0002	-.0001
Stddev	.0001	.0097	.0075	.0110	.0000	.0008	.0054	.0001	.0005
%RSD	24.88	29.53	8.508	134.3	9.686	38.99	2.500	50.63	464.5
#1	.0003	.0441	-.0969	-.0144	.0002	.0028	-.2193	.0002	.0004
#2	.0004	.0291	-.0823	.0045	.0002	.0017	-.2214	.0001	-.0006
#3	.0003	.0258	-.0861	-.0148	.0003	.0013	-.2111	.0002	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0018	-.0019	-.0062	.0003	.0002	.0017	.0004	.0003	.0002
Stddev	.0013	.0010	.0002	.0002	.0001	.0001	.0005	.0002	.0001
%RSD	71.52	53.71	2.531	69.19	27.27	4.750	146.8	94.80	68.25
#1	.0030	-.0021	-.0064	.0005	.0002	.0018	.0010	.0004	.0003
#2	.0022	-.0027	-.0062	.0003	.0002	.0017	.0001	.0000	.0001
#3	.0004	-.0008	-.0061	.0001	.0003	.0016	.0000	.0004	.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/23/2016 14:36:46 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2655.0	6114.0	49282.	4294.0
Stddev	6.5	11.8	158.	11.4
%RSD	.24648	.19341	.32019	.26447
#1	2657.7	6119.6	49205.	4307.1
#2	2659.7	6122.0	49464.	4286.8
#3	2647.5	6100.5	49178.	4288.1

Zoom In Zoom Out

Sample Name: MP30383-B1 Acquired: 5/23/2016 14:40:58 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0481	26.62	1.943	2.054	.0521	25.34	.0507	.5054	.2088	.2582
Stddev	.0001	.07	.004	.009	.0004	.09	.0001	.0006	.0006	.0007
%RSD	.2873	.2664	.1808	.4542	.8353	.3481	.2451	.1116	.2795	.2817
#1	.0482	26.69	1.943	2.063	.0526	25.42	.0506	.5051	.2086	.2574
#2	.0481	26.55	1.946	2.045	.0519	25.25	.0508	.5060	.2084	.2587
#3	.0480	26.61	1.939	2.052	.0519	25.35	.0507	.5050	.2095	.2585
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.93	25.38	25.13	.5222	.4782	26.23	.5068	.4914	.4937	1.964
Stddev	.09	.10	.02	.0014	.0011	.12	.0005	.0009	.0003	.005
%RSD	.3458	.3799	.0885	.2631	.2271	.4434	.0949	.1868	.0539	.2485
#1	26.01	25.47	25.15	.5215	.4775	26.37	.5067	.4903	.4935	1.969
#2	25.83	25.28	25.15	.5214	.4795	26.15	.5073	.4919	.4936	1.965
#3	25.94	25.38	25.11	.5238	.4777	26.19	.5063	.4919	.4940	1.959
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0103	.4904	.4892	.4975	1.994	.4723	.5046
Stddev	.0013	.0003	.0023	.0014	.002	.0009	.0007
%RSD	13.11	.0710	.4726	.2744	.1025	.1889	.1338
#1	.0118	.4903	.4915	.4971	1.994	.4721	.5038
#2	.0092	.4908	.4869	.4963	1.992	.4716	.5050
#3	.0098	.4902	.4893	.4990	1.996	.4733	.5049
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: MP30383-B1 Acquired: 5/23/2016 14:40:58 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2418.0	6033.6	47961.	4339.2
Stddev	2.5	6.8	166.	16.5
%RSD	.10273	.11219	.34668	.38070
#1	2418.4	6040.4	48075.	4346.4
#2	2420.3	6026.8	48038.	4350.8
#3	2415.4	6033.8	47770.	4320.2

Zoom In Zoom Out

Sample Name: FA33900-19 Acquired: 5/23/2016 14:44:57 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0003	.0215	.0002	.0168	-.0001	1.170	.0002	.0000	.0001
Stddev	.0002	.0041	.0004	.0001	.0001	.000	.0000	.000	.0002
%RSD	66.76	18.86	169.1	.4188	69.61	.0207	11.19	1201.	113.0
#1	-.0001	.0254	.0006	.0168	.0000	1.170	.0002	.0001	.0000
#2	-.0005	.0173	.0003	.0168	-.0001	1.170	.0002	-.0002	.0002
#3	-.0002	.0219	-.0002	.0169	-.0001	1.169	.0002	.0001	.0003

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0043	.0131	.0670	.1017	.0080	-.0001	F155.7	.0003	.0005
Stddev	.0002	.0050	.0117	.0096	.0001	.0002	1.8	.0000	.0009
%RSD	4.805	38.17	17.51	9.436	.8773	294.8	1.139	7.917	180.5
#1	.0043	.0188	.0805	.1127	.0079	.0001	157.5	.0003	.0002
#2	.0041	.0109	.0604	.0976	.0080	-.0002	155.6	.0003	.0015
#3	.0045	.0096	.0600	.0948	.0081	-.0002	154.0	.0003	-.0002

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0004	-.0006	.0711	.0000	.0040	.0004	-.0009	-.0002	.0509
Stddev	.0004	.0020	.0007	.0001	.0001	.0001	.0003	.0002	.0001
%RSD	92.86	325.8	1.029	568.5	2.608	19.75	35.21	100.4	.1642
#1	.0009	-.0002	.0717	.0001	.0041	.0004	-.0009	.0000	.0510
#2	.0001	-.0028	.0703	-.0001	.0039	.0003	-.0007	-.0003	.0510
#3	.0003	.0011	.0715	.0001	.0041	.0003	-.0013	-.0001	.0509

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2397.0	5909.4	46514.	4346.4
Stddev	5.1	2.1	86.	32.4
%RSD	.21362	.03538	.18429	.74495
#1	2391.2	5908.2	46501.	4316.0
#2	2400.9	5908.3	46605.	4342.9
#3	2398.9	5911.8	46435.	4380.4

Zoom In Zoom Out

Sample Name: MP30383-D1 Acquired: 5/23/2016 14:49:15 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0007	.0303	-.0002	.0171	-.0001	1.179	.0002	-.0002	.0001
Stddev	.0005	.0153	.0006	.0003	.0001	.006	.0001	.0000	.0002
%RSD	76.31	50.52	328.7	1.523	57.96	.5110	41.15	23.94	238.4
#1	-.0002	.0439	-.0003	.0170	-.0001	1.184	.0002	-.0002	.0001
#2	-.0012	.0332	-.0007	.0174	-.0001	1.172	.0002	-.0002	-.0001
#3	-.0007	.0137	.0005	.0170	-.0002	1.179	.0001	-.0001	.0003

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0042	.0025	.0856	.0806	.0081	-.0004	F157.2	.0001	.0006
Stddev	.0003	.0025	.0147	.0163	.0000	.0000	.9	.0001	.0003
%RSD	6.101	99.95	17.14	20.27	.3560	7.903	.5825	102.9	53.87
#1	.0042	.0040	.0687	.0969	.0081	-.0004	157.8	.0000	.0006
#2	.0044	.0038	.0939	.0808	.0081	-.0004	157.7	.0000	.0003
#3	.0039	-.0004	.0943	.0642	.0081	-.0004	156.2	.0001	.0009

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0010	-.0003	.0729	.0001	.0041	.0002	-.0014	-.0002	.0509
Stddev	.0011	.0013	.0011	.0001	.0000	.0001	.0009	.0001	.0001
%RSD	107.0	360.4	1.572	220.3	.8613	41.79	64.74	55.52	.1815
#1	-.0020	-.0017	.0741	-.0001	.0042	.0001	-.0007	-.0002	.0508
#2	-.0012	.0008	.0718	.0000	.0041	.0003	-.0023	-.0002	.0510
#3	.0001	-.0002	.0730	.0002	.0041	.0002	-.0010	-.0001	.0509

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2391.9	5914.9	46327.	4294.4
Stddev	3.0	.6	147.	19.6
%RSD	.12562	.00953	.31756	.45687
#1	2395.2	5915.1	46159.	4273.0
#2	2389.2	5915.3	46431.	4311.4
#3	2391.4	5914.3	46392.	4298.9

Zoom In Zoom Out

Sample Name: MP30383-SD1 Acquired: 5/23/2016 14:53:33 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0018	.0364	.0025	.0160	-.0002	1.178	.0001	-.0005	-.0005	.0062
Stddev	.0005	.0343	.0030	.0006	.0003	.006	.0002	.0000	.0013	.0002
%RSD	27.49	94.30	118.7	3.750	144.7	.5410	183.0	8.122	243.4	3.223
#1	-.0017	.0755	.0052	.0162	-.0001	1.183	.0003	-.0005	-.0008	.0059
#2	-.0024	.0115	-.0007	.0154	.0000	1.180	.0000	-.0006	.0009	.0062
#3	-.0014	.0221	.0032	.0165	-.0005	1.171	.0000	-.0005	-.0017	.0063

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	-.0171	-.3258	.1205	.0076	-.0023	164.5	-.0001	.0009	-.0022	-.0143
Stddev	.0146	.1526	.0361	.0001	.0001	.3	.0004	.0009	.0012	.0079
%RSD	85.34	46.84	29.96	1.921	2.371	.2008	288.2	97.00	55.69	55.02
#1	-.0282	-.4289	.1165	.0078	-.0023	164.1	.0002	.0002	-.0009	-.0228
#2	-.0006	-.1505	.1584	.0075	-.0024	164.6	.0000	.0007	-.0033	-.0073
#3	-.0225	-.3980	.0866	.0076	-.0023	164.7	-.0006	.0019	-.0025	-.0128

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0470	-.0002	.0036	-.0002	-.0037	-.0014	.1038
Stddev	.0051	.0010	.0003	.0005	.0013	.0019	.0004
%RSD	10.83	442.5	7.946	228.2	34.73	131.2	.3414
#1	.0529	-.0013	.0036	-.0007	-.0026	.0006	.1037
#2	.0439	-.0001	.0033	-.0003	-.0051	-.0031	.1041
#3	.0442	.0007	.0039	.0003	-.0034	-.0018	.1034

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2515.5	6019.8	48150.	4321.8
Stddev	3.6	4.3	183.	17.8
%RSD	.14360	.07214	.38080	.41190
#1	2515.5	6023.2	48262.	4341.5
#2	2519.1	6021.3	48251.	4317.0
#3	2511.9	6014.9	47939.	4306.9

Zoom In Zoom Out

Sample Name: MP30383-S1 Acquired: 5/23/2016 14:57:42 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0492	26.82	1.990	2.081	.0528	26.64	.0512	.5051	.2150
Stddev	.0004	.21	.003	.011	.0004	.22	.0001	.0004	.0009
%RSD	.8779	.7741	.1486	.5485	.6774	.8298	.1995	.0720	.3974
#1	.0488	26.80	1.986	2.079	.0525	26.60	.0512	.5047	.2143
#2	.0496	27.04	1.992	2.094	.0532	26.88	.0511	.5052	.2159
#3	.0492	26.63	1.991	2.071	.0528	26.44	.0513	.5054	.2147

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2653	26.27	25.82	25.28	.5347	.4804	F184.4	.5052	.5051
Stddev	.0004	.13	.17	.19	.0012	.0007	5.0	.0008	.0015
%RSD	.1521	.4915	.6702	.7553	.2264	.1412	2.694	.1587	.2876
#1	.2649	26.20	25.76	25.20	.5333	.4798	185.1	.5048	.5037
#2	.2656	26.42	26.01	25.50	.5357	.4802	189.0	.5047	.5048
#3	.2656	26.19	25.68	25.15	.5351	.4811	179.1	.5061	.5066

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.4990	2.029	.0826	.4838	.5003	.5053	2.000	.4791	.5640
Stddev	.0007	.001	.0036	.0008	.0023	.0018	.005	.0011	.0010
%RSD	.1500	.0562	4.408	.1752	.4666	.3528	.2618	.2294	.1798
#1	.4981	2.028	.0831	.4844	.5004	.5033	1.997	.4785	.5637
#2	.4995	2.030	.0860	.4828	.5025	.5062	1.997	.4804	.5632
#3	.4994	2.028	.0788	.4841	.4979	.5066	2.006	.4784	.5652

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2289.9	5916.2	46387.	4336.3
Stddev	9.1	12.5	97.	55.3
%RSD	.39907	.21146	.20831	1.2760
#1	2293.9	5921.5	46474.	4351.0
#2	2296.4	5925.2	46283.	4275.1
#3	2279.5	5901.9	46403.	4382.9

Zoom In Zoom Out

Sample Name: MP30383-S2 Acquired: 5/23/2016 15:01:49 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0488	26.76	1.984	2.096	.0533	26.59	.0510	.5031	.2136
Stddev	.0003	.18	.007	.013	.0004	.17	.0001	.0011	.0004
%RSD	.5714	.6573	.3745	.5950	.7804	.6434	.2497	.2215	.1957
#1	.0490	26.93	1.975	2.107	.0537	26.76	.0509	.5019	.2138
#2	.0485	26.78	1.987	2.100	.0533	26.60	.0511	.5033	.2140
#3	.0490	26.58	1.989	2.083	.0528	26.41	.0511	.5041	.2132

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2637	26.47	25.84	25.38	.5344	.4784	F181.5	.5029	.5039
Stddev	.0006	.17	.22	.20	.0008	.0013	1.4	.0012	.0014
%RSD	.2433	.6593	.8624	.7956	.1513	.2618	.7973	.2289	.2726
#1	.2644	26.61	26.04	25.61	.5348	.4770	183.1	.5016	.5042
#2	.2636	26.53	25.86	25.32	.5349	.4791	180.4	.5033	.5024
#3	.2631	26.28	25.60	25.22	.5334	.4792	180.8	.5037	.5051

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.4974	2.021	.0781	.4805	.5021	.5051	1.990	.4761	.5613
Stddev	.0022	.007	.0004	.0009	.0033	.0003	.005	.0014	.0006
%RSD	.4461	.3368	.4983	.1975	.6669	.0578	.2494	.2974	.1009
#1	.4968	2.014	.0777	.4794	.5052	.5052	1.988	.4763	.5609
#2	.4999	2.023	.0785	.4813	.5026	.5052	1.987	.4774	.5611
#3	.4956	2.028	.0782	.4807	.4986	.5047	1.996	.4746	.5620

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2289.0	5911.4	46081.	4269.3
Stddev	9.3	7.5	142.	28.8
%RSD	.40737	.12635	.30737	.67344
#1	2280.5	5910.2	46031.	4236.1
#2	2299.0	5919.4	45972.	4285.7
#3	2287.7	5904.6	46241.	4286.0

Zoom In Zoom Out

Sample Name: FA33918-1L Acquired: 5/23/2016 15:05:56 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0000	.0163	.0005	.0040	-.0001	10.72	.0000	.0004	.0002
Stddev	.000	.0167	.0002	.0001	.0001	.05	.000	.0001	.0002
%RSD	2311.	102.7	34.24	1.498	87.70	.4714	38.81	33.87	115.8
#1	.0001	.0356	.0006	.0040	-.0002	10.68	.0000	.0003	.0002
#2	-.0004	.0067	.0007	.0040	.0000	10.78	.0000	.0005	.0005
#3	.0003	.0065	.0003	.0041	-.0001	10.70	.0000	.0003	.0000

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0005	2.597	.8598	1.003	.1096	.0003	F172.3	.0026	.0001
Stddev	.0002	.012	.0099	.020	.0003	.0001	2.0	.0001	.0001
%RSD	52.76	.4665	1.157	2.036	.2813	19.80	1.139	3.521	175.4
#1	.0007	2.588	.8676	.9818	.1098	.0004	172.2	.0025	.0000
#2	.0005	2.611	.8633	1.023	.1098	.0003	174.3	.0026	.0001
#3	.0002	2.592	.8486	1.004	.1093	.0003	170.4	.0026	.0001

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0001	.0003	.1387	.0000	.0189	.0009	.0004	.0003	.0401
Stddev	.0003	.0011	.0030	.0000	.0000	.0002	.0008	.0001	.0001
%RSD	251.5	321.2	2.161	333.8	.2390	20.61	213.5	39.60	.2838
#1	.0000	.0015	.1392	.0001	.0189	.0011	-.0005	.0003	.0400
#2	.0005	-.0001	.1415	.0000	.0189	.0007	.0005	.0002	.0400
#3	-.0001	-.0004	.1355	.0000	.0189	.0010	.0011	.0004	.0402

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2406.0	5997.0	46770.	4409.4
Stddev	11.2	24.2	288.	40.2
%RSD	.46645	.40326	.61629	.91101
#1	2416.8	6015.9	46654.	4419.9
#2	2406.8	6005.3	46558.	4365.1
#3	2394.4	5969.7	47098.	4443.3

Zoom In Zoom Out

Sample Name: FA33999-1L Acquired: 5/23/2016 15:10:11 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0003	.4814	-.0002	.0271	-.0001	14.77	.0001	.0001	.0007
Stddev	.0003	.0106	.0005	.0003	.0000	.07	.0000	.0001	.0001
%RSD	83.73	2.200	255.7	1.221	47.97	.4513	9.205	211.6	10.17
#1	-.0004	.4896	.0001	.0270	-.0001	14.76	.0001	.0002	.0008
#2	.0000	.4852	.0001	.0267	.0000	14.84	.0001	.0000	.0007
#3	-.0006	.4694	-.0007	.0274	-.0001	14.71	.0001	.0000	.0006

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0016	.1868	.4014	.4705	.0288	-.0006	F156.5	.0003	.0041
Stddev	.0001	.0050	.0274	.0295	.0001	.0000	1.4	.0002	.0003
%RSD	6.338	2.656	6.838	6.272	.4127	5.887	.8874	57.66	8.174
#1	.0017	.1924	.3888	.4410	.0288	-.0006	157.5	.0004	.0043
#2	.0016	.1829	.3824	.4704	.0286	-.0006	157.1	.0001	.0043
#3	.0015	.1850	.4328	.5000	.0289	-.0006	154.9	.0005	.0037

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0004	-.0003	.5573	.0001	.0247	.0174	-.0005	.0006	.0390
Stddev	.0015	.0005	.0049	.0002	.0002	.0003	.0004	.0002	.0001
%RSD	347.4	145.2	.8729	118.1	.6070	1.660	88.48	35.44	.1638
#1	-.0021	-.0002	.5559	.0003	.0247	.0171	.0000	.0005	.0391
#2	.0004	.0001	.5533	.0001	.0249	.0174	-.0006	.0004	.0390
#3	.0004	-.0009	.5627	.0000	.0246	.0177	-.0007	.0008	.0389

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2372.7	5912.3	46895.	4350.9
Stddev	3.8	7.3	236.	40.9
%RSD	.15818	.12342	.50424	.93976
#1	2372.9	5905.9	46656.	4353.2
#2	2368.9	5910.9	47128.	4308.9
#3	2376.4	5920.2	46901.	4390.6

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: FA34019-1L Acquired: 5/23/2016 15:14:30 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0005	.0922	-.0004	.0063	-.0001	3.668	.0000	.0000	.0007
Stddev	.0002	.0185	.0005	.0001	.0000	.020	.0000	.000	.0002
%RSD	34.48	20.05	142.0	1.873	35.80	.5354	942.0	2900.	22.24
#1	-.0006	.0754	-.0008	.0062	-.0001	3.648	.0000	.0000	.0006
#2	-.0006	.0893	-.0003	.0064	-.0001	3.667	.0000	.0001	.0007
#3	-.0003	.1120	.0001	.0062	-.0001	3.688	.0000	-.0001	.0009

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0006	.0659	.1418	.2446	.0015	-.0005	F163.7	.0003	.0004
Stddev	.0003	.0018	.0106	.0103	.0000	.0001	3.2	.0002	.0001
%RSD	53.91	2.757	7.459	4.225	3.160	12.05	1.938	52.02	19.62
#1	.0002	.0655	.1398	.2331	.0015	-.0005	167.0	.0001	.0004
#2	.0008	.0643	.1323	.2531	.0016	-.0005	163.5	.0003	.0003
#3	.0007	.0679	.1532	.2475	.0015	-.0006	160.7	.0004	.0003

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0004	-.0004	.0635	.0000	.0066	.0011	-.0010	.0007	.0034
Stddev	.0002	.0002	.0006	.0001	.0001	.0000	.0008	.0002	.0001
%RSD	37.54	45.68	1.004	12540.	1.617	4.093	84.12	24.43	2.306
#1	-.0006	-.0006	.0633	.0001	.0065	.0010	-.0012	.0009	.0034
#2	-.0003	-.0004	.0629	-.0001	.0067	.0011	-.0001	.0007	.0035
#3	-.0005	-.0002	.0642	.0000	.0065	.0010	-.0016	.0005	.0035

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2375.3	5972.8	46815.	4376.6
Stddev	9.2	13.5	104.	11.9
%RSD	.38682	.22653	.22166	.27178
#1	2379.7	5975.4	46860.	4380.8
#2	2381.5	5984.8	46889.	4363.2
#3	2364.8	5958.1	46697.	4385.9

Zoom In Zoom Out

Sample Name: FA34023-1L Acquired: 5/23/2016 15:18:48 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0003	.0033	-.0014	.0283	.0000	90.85	.0000	.0005	.0004
Stddev	.0002	.0133	.0003	.0002	.000	.15	.0000	.0001	.0001
%RSD	58.78	410.1	19.68	.7932	275.0	.1679	135.3	20.42	30.77
#1	-.0002	-.0121	-.0011	.0286	.0000	90.97	.0000	.0005	.0003
#2	-.0003	.0111	-.0015	.0282	-.0001	90.90	.0000	.0004	.0003
#3	-.0006	.0108	-.0015	.0282	.0000	90.68	.0000	.0006	.0005

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0007	.0003	.2392	1.278	.0910	-.0010	F155.7	.0006	-.0004
Stddev	.0002	.0004	.0094	.011	.0001	.0000	1.3	.0001	.0004
%RSD	30.66	108.2	3.947	.8885	.0588	4.131	.8413	22.27	92.06
#1	.0004	.0006	.2472	1.280	.0910	-.0011	157.2	.0007	-.0007
#2	.0008	-.0001	.2288	1.265	.0910	-.0010	154.7	.0005	-.0005
#3	.0008	.0005	.2417	1.288	.0911	-.0010	155.2	.0006	.0000

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0002	-.0010	.0559	-.0002	.1747	.0010	-.0005	.0001	.0045
Stddev	.0001	.0009	.0006	.0001	.0006	.0000	.0008	.0002	.0000
%RSD	63.24	84.11	1.146	69.82	.3193	3.921	138.2	177.6	.3437
#1	-.0001	-.0002	.0562	-.0002	.1747	.0011	-.0014	-.0001	.0045
#2	-.0003	-.0019	.0564	-.0004	.1752	.0010	.0000	.0002	.0045
#3	-.0002	-.0010	.0552	-.0001	.1741	.0010	-.0003	.0001	.0045

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2339.5	5880.9	46369.	4343.0
Stddev	4.0	11.9	140.	44.1
%RSD	.17031	.20290	.30196	1.0160
#1	2337.2	5886.7	46516.	4294.2
#2	2344.1	5888.8	46353.	4380.0
#3	2337.1	5867.2	46238.	4354.7

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/23/2016 15:23:05 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2521	39.95	1.992	2.010	2.028	40.08	2.034	2.022	2.050	2.019
Stddev	.0005	.05	.004	.007	.006	.15	.003	.003	.003	.006
%RSD	.2028	.1167	.1999	.3494	.2838	.3664	.1587	.1284	.1337	.3009
#1	.2523	39.98	1.988	2.005	2.027	40.06	2.032	2.020	2.047	2.025
#2	.2515	39.99	1.991	2.018	2.034	40.23	2.032	2.020	2.053	2.014
#3	.2524	39.90	1.996	2.007	2.023	39.94	2.038	2.025	2.050	2.017
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	42.07	40.63	40.29	2.050	2.035	41.28	2.010	2.006	1.997	2.007
Stddev	.23	.16	.20	.001	.006	.10	.003	.001	.003	.009
%RSD	.5492	.4059	.4966	.0625	.2923	.2350	.1480	.0532	.1708	.4346
#1	41.91	40.62	40.20	2.048	2.029	41.32	2.008	2.007	1.994	1.997
#2	42.34	40.80	40.51	2.051	2.035	41.35	2.007	2.005	1.998	2.008
#3	41.97	40.48	40.15	2.050	2.041	41.17	2.013	2.007	2.000	2.015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.222	2.035	2.091	2.099	2.021	2.047	2.029
Stddev	.003	.004	.004	.001	.002	.002	.003
%RSD	.1448	.2134	.2110	.0280	.1053	.0939	.1614
#1	2.220	2.031	2.089	2.100	2.023	2.049	2.027
#2	2.222	2.033	2.095	2.098	2.019	2.045	2.027
#3	2.226	2.039	2.087	2.099	2.020	2.047	2.033
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/23/2016 15:23:05 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2263.1	5829.9	47098.	4302.2
Stddev	1.6	6.6	213.	33.5
%RSD	.07096	.11363	.45258	.77818
#1	2263.6	5834.8	47306.	4294.7
#2	2264.4	5832.6	46880.	4273.1
#3	2261.3	5822.4	47108.	4338.8

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/23/2016 15:27:03 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0084	.0007	.0006	.0004	.0079	.0002	.0003	.0006
Stddev	.0003	.0094	.0008	.0001	.0001	.0017	.0001	.0001	.0001
%RSD	90.84	113.0	106.4	24.30	17.16	20.98	46.77	39.56	22.12
#1	-.0006	.0006	.0011	.0004	.0005	.0065	.0004	.0004	.0006
#2	-.0001	.0056	.0012	.0006	.0005	.0076	.0002	.0002	.0007
#3	-.0002	.0189	-.0002	.0007	.0004	.0098	.0002	.0002	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008	.0339	-.1014	.0077	.0005	F.0019	-.1968	.0003	.0005
Stddev	.0001	.0045	.0076	.0233	.0000	.0006	.0020	.0003	.0005
%RSD	17.25	13.15	7.446	304.3	8.201	34.26	.9939	116.7	101.9
#1	.0009	.0385	-.0999	.0125	.0005	.0025	-.1962	.0007	.0003
#2	.0009	.0335	-.1096	-.0177	.0005	.0018	-.1990	.0002	.0011
#3	.0007	.0296	-.0947	.0282	.0005	.0013	-.1953	.0000	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0007	-.0009	-.0064	.0006	.0004	.0016	.0000	.0005	.0007
Stddev	.0008	.0012	.0003	.0002	.0000	.0001	.000	.0001	.0000
%RSD	111.1	134.3	5.284	36.36	9.847	8.387	679.6	29.10	2.115
#1	.0009	-.0017	-.0060	.0009	.0004	.0017	.0001	.0004	.0007
#2	.0014	-.0014	-.0064	.0005	.0005	.0016	-.0004	.0006	.0007
#3	-.0002	.0005	-.0067	.0005	.0005	.0015	.0002	.0004	.0007
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/23/2016 15:27:03 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2668.1	6102.3	49640.	4333.1
Stddev	6.7	13.4	57.	61.1
%RSD	.25213	.22034	.11402	1.4094
#1	2675.4	6116.7	49635.	4262.6
#2	2666.7	6099.9	49586.	4369.8
#3	2662.2	6090.2	49699.	4366.9

Zoom In Zoom Out

Sample Name: FA34054-1 Acquired: 5/23/2016 15:31:14 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0002	.0184	.0000	.0014	-.0001	4.240	.0001	.0000	.0004	.0009
Stddev	.0004	.0077	.0002	.0001	.0001	.017	.0000	.000	.0003	.0003
%RSD	267.5	42.05	1200.	7.544	54.48	.3929	19.48	403.2	68.21	28.79
#1	.0002	.0236	.0003	.0015	-.0001	4.256	.0001	-.0001	.0007	.0006
#2	-.0003	.0222	.0000	.0015	-.0002	4.241	.0001	.0000	.0002	.0010
#3	.0006	.0095	-.0002	.0013	-.0001	4.223	.0001	.0001	.0003	.0011

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0174	.2787	.3859	.0002	.0001	.9686	-.0001	.0000	.0004	-.0011
Stddev	.0035	.0067	.0134	.0000	.0001	.0058	.0000	.000	.0007	.0003
%RSD	19.89	2.422	3.483	17.27	87.16	.5977	38.80	21280.	204.8	27.96
#1	.0140	.2746	.3867	.0001	.0002	.9725	-.0001	-.0002	-.0004	-.0013
#2	.0209	.2865	.3990	.0002	.0001	.9714	-.0001	.0002	.0010	-.0012
#3	.0175	.2749	.3722	.0002	.0000	.9620	-.0001	-.0001	.0005	-.0007

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.1446	-.0002	.0115	.0013	-.0006	.0002	.0001
Stddev	.0026	.0003	.0000	.0001	.0002	.0001	.0000
%RSD	1.784	221.9	.4013	7.703	27.31	46.73	58.57
#1	.1434	-.0001	.0115	.0013	-.0007	.0002	.0000
#2	.1429	.0001	.0116	.0012	-.0007	.0002	.0001
#3	.1476	-.0005	.0115	.0014	-.0004	.0001	.0001

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2761.5	6378.0	51917.	4539.5
Stddev	12.3	28.1	69.	26.8
%RSD	.44393	.44066	.13216	.59063
#1	2772.2	6403.8	51992.	4509.6
#2	2764.2	6382.2	51857.	4561.3
#3	2748.2	6348.0	51902.	4547.8

Zoom In Zoom Out

Sample Name: FA34038-1L Acquired: 5/23/2016 15:35:23 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0002	.0108	.0014	.0103	-.0001	5.103	.0000	.0088	.0003	.0005
Stddev	.0001	.0061	.0002	.0001	.0001	.006	.000	.0000	.0004	.0000
%RSD	50.35	56.24	10.74	1.325	139.3	.1101	523.6	.0332	120.5	6.979
#1	-.0001	.0079	.0014	.0101	.0001	5.105	.0000	.0088	-.0001	.0005
#2	-.0003	.0067	.0016	.0103	-.0002	5.107	.0000	.0088	.0005	.0005
#3	-.0003	.0177	.0013	.0104	-.0001	5.097	.0000	.0088	.0005	.0006

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	2.697	.1766	.7254	.0422	.0004	11.78	.0227	-.0007	-.0001	-.0008
Stddev	.011	.0249	.0142	.0001	.0001	.03	.0000	.0006	.0001	.0015
%RSD	.4137	14.13	1.952	.1940	35.82	.2497	.1242	84.81	109.1	197.9
#1	2.691	.1487	.7336	.0421	.0005	11.80	.0228	.0000	.0000	-.0025
#2	2.690	.1966	.7091	.0421	.0005	11.74	.0227	-.0010	-.0002	-.0004
#3	2.710	.1845	.7336	.0423	.0002	11.79	.0227	-.0011	-.0001	.0005

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.4569	-.0002	.0274	.0004	-.0010	.0000	.0089
Stddev	.0020	.0000	.0001	.0001	.0001	.0001	.0000
%RSD	.4347	16.41	.2253	22.34	9.258	1569.	.1696
#1	.4557	-.0002	.0273	.0004	-.0009	.0001	.0088
#2	.4592	-.0002	.0274	.0003	-.0011	.0000	.0089
#3	.4558	-.0003	.0275	.0005	-.0011	-.0001	.0089

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2618.2	6152.8	49133.	4391.6
Stddev	8.4	13.9	293.	35.9
%RSD	.32040	.22639	.59712	.81739
#1	2627.9	6168.7	49249.	4384.0
#2	2613.4	6146.6	49351.	4360.1
#3	2613.2	6143.0	48800.	4430.7

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: MP30383-D2 Acquired: 5/23/2016 15:39:29 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0001	.0128	-.0012	.0310	-.0001	93.67	.0001	.0005	.0003
Stddev	.0004	.0094	.0006	.0002	.0000	.12	.0000	.0001	.0004
%RSD	700.2	73.22	55.07	.5640	48.35	.1319	12.37	25.03	141.3
#1	-.0002	.0232	-.0004	.0309	.0000	93.68	.0001	.0005	.0002
#2	.0004	.0104	-.0014	.0312	-.0001	93.79	.0001	.0004	.0008
#3	-.0003	.0049	-.0016	.0309	-.0001	93.54	.0000	.0007	-.0001

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0009	.0011	.1893	1.310	.0930	-.0008	F159.1	.0005	-.0001
Stddev	.0000	.0028	.0272	.032	.0001	.0001	2.8	.0001	.0004
%RSD	4.318	242.7	14.39	2.457	.1438	7.340	1.773	24.27	704.5
#1	.0009	.0035	.2115	1.306	.0929	-.0009	156.5	.0006	-.0005
#2	.0008	-.0019	.1589	1.344	.0931	-.0008	162.1	.0005	.0002
#3	.0009	.0018	.1976	1.280	.0929	-.0008	158.7	.0003	.0002

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0002	.0011	.0517	-.0001	.1775	.0012	.0001	.0002	.0050
Stddev	.0005	.0012	.0031	.0001	.0003	.0001	.0005	.0002	.0000
%RSD	263.8	114.7	5.981	93.54	.1494	6.930	726.1	134.9	.6680
#1	.0004	.0006	.0553	-.0001	.1778	.0013	-.0005	-.0001	.0050
#2	-.0005	.0001	.0498	-.0001	.1774	.0012	.0003	.0003	.0050
#3	-.0004	.0024	.0501	.0000	.1773	.0011	.0005	.0004	.0050

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2322.4	5786.4	46072.	4363.1
Stddev	2.3	2.6	149.	24.4
%RSD	.10119	.04414	.32248	.55943
#1	2321.3	5786.3	45929.	4384.9
#2	2320.8	5783.9	46060.	4336.8
#3	2325.1	5789.0	46226.	4367.7

Zoom In Zoom Out

Sample Name: MP30383-MB2 Acquired: 5/23/2016 15:43:46 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0086	-.0006	.0005	.0000	.0690	.0000	.0000	.0005
Stddev	.0003	.0114	.0009	.0001	.000	.0020	.000	.0000	.0004
%RSD	221.6	133.0	158.1	12.56	175.2	2.953	59.62	134.8	77.41
#1	-.0001	-.0030	-.0012	.0005	.0000	.0670	.0000	.0001	.0009
#2	.0002	.0089	.0005	.0004	-.0001	.0691	.0000	.0000	.0003
#3	-.0005	.0199	-.0009	.0005	-.0001	.0711	.0000	.0000	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F.0194	-.0007	.0355	.0170	.0005	-.0005	F152.0	.0001	.0017
Stddev	.0002	.0046	.0177	.0201	.0000	.0001	1.4	.0001	.0010
%RSD	1.195	656.5	49.93	118.1	8.244	13.44	.9247	123.6	55.32
#1	.0194	-.0007	.0169	-.0051	.0005	-.0005	153.4	.0001	.0014
#2	.0191	.0039	.0375	.0221	.0004	-.0004	150.6	.0000	.0010
#3	.0196	-.0053	.0522	.0341	.0005	-.0005	152.0	.0002	.0028
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit	.0125						2.500		
Low Limit	-.0125						-2.500		

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0005	-.0002	.0063	-.0001	.0002	-.0001	-.0012	-.0001	F.0546
Stddev	.0008	.0021	.0004	.0002	.0000	.0000	.0011	.0002	.0002
%RSD	148.5	929.7	6.961	253.7	28.09	54.19	86.45	119.9	.2805
#1	-.0013	-.0027	.0061	-.0001	.0002	-.0001	-.0024	-.0002	.0548
#2	-.0006	.0012	.0060	-.0003	.0001	-.0001	-.0008	.0000	.0546
#3	.0003	.0008	.0068	.0001	.0002	-.0001	-.0004	-.0002	.0545
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit									.0100
Low Limit									-.0100

Zoom In Zoom Out

Sample Name: MP30383-MB2 Acquired: 5/23/2016 15:43:46 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2390.0	5856.6	46573.	4406.6
Stddev	1.1	6.6	280.	47.9
%RSD	.04785	.11196	.60169	1.0868
#1	2390.7	5851.2	46548.	4368.7
#2	2390.5	5854.6	46865.	4460.4
#3	2388.7	5863.9	46306.	4390.8

Zoom In Zoom Out

Sample Name: MP30383-B2 Acquired: 5/23/2016 15:48:05 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0490	26.93	2.000	2.076	.0525	25.57	.0511	.5057	.2113
Stddev	.0002	.11	.002	.013	.0002	.13	.0000	.0003	.0007
%RSD	.4960	.4150	.0779	.6208	.3431	.4943	.0787	.0665	.3226
#1	.0487	27.03	2.001	2.083	.0527	25.66	.0511	.5059	.2115
#2	.0492	26.81	1.998	2.061	.0524	25.43	.0511	.5053	.2118
#3	.0490	26.96	1.999	2.083	.0524	25.62	.0511	.5059	.2105
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2800	26.10	25.68	25.13	.5253	.4855	F176.7	.5073	.5034
Stddev	.0005	.19	.10	.13	.0007	.0003	.9	.0003	.0023
%RSD	.1669	.7365	.4043	.5319	.1418	.0666	.5268	.0497	.4475
#1	.2803	26.16	25.73	25.22	.5249	.4852	177.4	.5076	.5052
#2	.2802	25.89	25.56	24.97	.5262	.4854	175.7	.5072	.5008
#3	.2795	26.26	25.74	25.19	.5248	.4858	177.1	.5072	.5041
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value							25.00		
Range							20.00%		

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4997	2.039	.0120	.4917	.4975	.5071	1.991	.4788	.5669
Stddev	.0021	.003	.0006	.0009	.0022	.0007	.003	.0012	.0008
%RSD	.4302	.1639	5.186	.1908	.4377	.1308	.1241	.2476	.1480
#1	.4974	2.042	.0126	.4918	.4993	.5076	1.993	.4780	.5678
#2	.5003	2.039	.0119	.4907	.4951	.5073	1.989	.4801	.5662
#3	.5016	2.036	.0114	.4926	.4980	.5063	1.992	.4782	.5667
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

7.5

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: MP30383-B2 Acquired: 5/23/2016 15:48:05 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2289.9	5878.0	46397.	4331.7
Stddev	6.5	12.2	137.	17.3
%RSD	.28226	.20816	.29435	.39866
#1	2283.1	5864.4	46487.	4339.2
#2	2296.0	5888.1	46239.	4344.1
#3	2290.7	5881.5	46463.	4312.0

Zoom In Zoom Out

Sample Name: MP30383-MB3 Acquired: 5/23/2016 15:52:10 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0052	-.0004	.0002	.0000	.0151	.0000	-.0001	.0002	.0002
Stddev	.0002	.0053	.0006	.0002	.000	.0026	.000	.0001	.0003	.0001
%RSD	371.6	100.8	163.0	133.9	110.8	17.29	102.6	92.92	164.5	37.63
#1	.0002	.0113	.0001	.0004	-.0001	.0180	.0000	-.0002	.0000	.0002
#2	.0001	.0017	-.0010	.0002	.0000	.0129	.0000	-.0001	.0000	.0002
#3	-.0002	.0027	-.0001	-.0001	.0000	.0145	.0000	.0000	.0004	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0251	-.0789	-.0014	.0001	-.0001	-.1488	.0001	.0002	-.0013	-.0013
Stddev	.0071	.0144	.0199	.0000	.0001	.0105	.0001	.0003	.0008	.0012
%RSD	28.18	18.26	1373.	11.81	64.03	7.049	85.43	145.5	66.42	91.38
#1	.0333	-.0624	.0148	.0001	.0000	-.1477	.0002	.0000	-.0010	-.0021
#2	.0219	-.0889	.0044	.0001	-.0002	-.1388	.0000	.0000	-.0006	-.0019
#3	.0203	-.0853	-.0236	.0001	-.0002	-.1597	.0001	.0005	-.0022	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0022	.0000	-.0001	.0002	-.0003	-.0001	.0002
Stddev	.0005	.000	.0001	.0000	.0005	.0002	.0001
%RSD	24.21	1294.	88.13	19.80	140.8	175.7	41.21
#1	.0019	-.0003	-.0001	.0001	.0002	.0001	.0001
#2	.0029	.0000	.0000	.0002	-.0004	-.0001	.0002
#3	.0019	.0002	-.0001	.0002	-.0007	-.0003	.0002
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP30383-MB3 Acquired: 5/23/2016 15:52:10 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2701.5	6200.5	50424.	4358.6
Stddev	3.6	7.0	158.	60.2
%RSD	.13312	.11250	.31418	1.3816
#1	2699.0	6205.4	50243.	4295.4
#2	2705.6	6203.6	50539.	4365.3
#3	2699.9	6192.5	50489.	4415.3

Zoom In Zoom Out

Sample Name: MP30383-B3 Acquired: 5/23/2016 15:56:21 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0471	26.67	1.947	2.053	.0515	25.38	.0503	.5017	.2033	.2545
Stddev	.0005	.15	.002	.013	.0003	.11	.0000	.0007	.0011	.0003
%RSD	1.044	.5515	.1173	.6217	.5758	.4394	.0543	.1482	.5420	.1066
#1	.0466	26.51	1.945	2.045	.0513	25.27	.0503	.5009	.2022	.2542
#2	.0470	26.79	1.949	2.068	.0519	25.49	.0503	.5020	.2044	.2546
#3	.0476	26.71	1.948	2.047	.0514	25.39	.0503	.5023	.2034	.2547
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.79	25.33	24.99	.5126	.4752	25.76	.5062	.4842	.4932	1.973
Stddev	.16	.12	.13	.0008	.0005	.08	.0004	.0008	.0021	.001
%RSD	.6257	.4680	.5199	.1540	.1085	.3150	.0811	.1591	.4251	.0469
#1	25.64	25.27	24.85	.5117	.4747	25.68	.5057	.4838	.4930	1.972
#2	25.96	25.47	25.11	.5131	.4753	25.84	.5065	.4838	.4912	1.974
#3	25.78	25.26	25.01	.5129	.4757	25.75	.5063	.4851	.4954	1.973
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0084	.4926	.4851	.4885	1.968	.4674	.5009
Stddev	.0007	.0013	.0026	.0009	.005	.0004	.0010
%RSD	8.770	.2629	.5273	.1915	.2670	.0864	.2069
#1	.0077	.4911	.4841	.4876	1.962	.4678	.4997
#2	.0091	.4934	.4880	.4884	1.968	.4675	.5014
#3	.0083	.4933	.4832	.4895	1.973	.4670	.5015
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: MP30383-B3 Acquired: 5/23/2016 15:56:21 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2423.8	6007.7	48652.	4348.9
Stddev	11.0	11.0	193.	19.1
%RSD	.45577	.18257	.39692	.44001
#1	2435.4	6020.3	48731.	4364.0
#2	2422.4	6000.9	48432.	4355.3
#3	2413.4	6001.7	48793.	4327.4

Zoom In Zoom Out

Sample Name: MP30384-MB1 Acquired: 5/23/2016 16:00:19 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	-.0024	-.0003	.0001	-.0001	.0294	.0000	.0000	.0002	.0000
Stddev	.0001	.0044	.0002	.0001	.0001	.0012	.000	.0001	.0003	.0002
%RSD	150.6	181.9	60.66	86.99	76.52	4.172	66.63	662.0	205.4	621.6
#1	-.0001	.0006	-.0004	.0001	-.0002	.0299	.0000	.0000	-.0002	.0001
#2	.0002	-.0004	-.0003	.0001	.0000	.0303	.0000	.0001	.0002	.0002
#3	.0001	-.0075	-.0001	.0000	-.0002	.0280	.0000	-.0001	.0005	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0127	-.1187	.0088	.0000	-.0001	-.2262	-.0001	.0001	-.0006	-.0011
Stddev	.0040	.0065	.0055	.0000	.0001	.0058	.0001	.0003	.0011	.0013
%RSD	31.15	5.501	61.95	76.77	129.0	2.562	92.89	260.0	183.0	111.7
#1	.0167	-.1262	.0145	.0000	.0000	-.2222	-.0001	.0003	-.0010	.0003
#2	.0088	-.1157	.0037	.0000	-.0001	-.2235	-.0001	-.0003	.0007	-.0017
#3	.0125	-.1142	.0083	.0000	-.0001	-.2328	.0000	.0003	-.0015	-.0020
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0019	-.0002	.0000	.0000	.0000	-.0001	.0002
Stddev	.0004	.0002	.000	.0001	.000	.0002	.0000
%RSD	22.61	115.4	142.3	241.1	912.3	359.0	17.25
#1	.0022	-.0001	.0000	.0001	.0004	.0001	.0002
#2	.0014	-.0004	-.0001	.0000	-.0003	.0000	.0002
#3	.0020	.0000	.0000	.0000	-.0003	-.0002	.0002
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP30384-MB1 Acquired: 5/23/2016 16:00:19 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2701.3	6190.9	50822.	4391.1
Stddev	6.8	8.1	267.	17.8
%RSD	.25095	.13033	.52593	.40628
#1	2706.4	6185.9	51000.	4370.9
#2	2703.9	6200.2	50952.	4397.9
#3	2693.6	6186.7	50515.	4404.6

Zoom In Zoom Out

Sample Name: MP30384-B1 Acquired: 5/23/2016 16:04:31 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0480	26.64	1.948	2.069	.0524	25.30	.0508	.5077	.2097	.2593
Stddev	.0005	.05	.004	.005	.0001	.04	.0001	.0009	.0007	.0012
%RSD	1.028	.1956	.1887	.2458	.1075	.1400	.2310	.1688	.3178	.4726
#1	.0477	26.60	1.947	2.065	.0524	25.34	.0508	.5078	.2094	.2580
#2	.0486	26.61	1.944	2.066	.0525	25.27	.0507	.5068	.2105	.2605
#3	.0477	26.70	1.951	2.075	.0524	25.29	.0510	.5085	.2093	.2593
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	26.06	25.59	25.03	.5233	.4816	26.36	.5085	.4944	.4960	1.973
Stddev	.07	.06	.06	.0014	.0007	.01	.0008	.0009	.0009	.003
%RSD	.2684	.2417	.2388	.2619	.1537	.0532	.1612	.1760	.1787	.1416
#1	26.01	25.52	25.02	.5234	.4816	26.38	.5085	.4952	.4963	1.972
#2	26.02	25.62	25.09	.5246	.4808	26.35	.5076	.4935	.4950	1.971
#3	26.14	25.63	24.97	.5219	.4823	26.36	.5092	.4945	.4967	1.976
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0098	.4907	.4942	.5020	2.003	.4721	.5059
Stddev	.0002	.0005	.0011	.0015	.005	.0018	.0012
%RSD	1.707	.1078	.2183	.2960	.2452	.3919	.2324
#1	.0100	.4911	.4935	.5026	2.008	.4711	.5063
#2	.0097	.4901	.4936	.5031	1.999	.4742	.5046
#3	.0097	.4909	.4954	.5003	2.002	.4709	.5068
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: MP30384-B1 Acquired: 5/23/2016 16:04:31 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2411.4	6021.1	47970.	4314.8
Stddev	8.4	18.8	240.	20.9
%RSD	.34794	.31179	.50092	.48545
#1	2405.9	6011.9	47841.	4295.0
#2	2421.1	6042.7	47822.	4312.7
#3	2407.3	6008.7	48247.	4336.7

Zoom In Zoom Out

Sample Name: FA33931-1L Acquired: 5/23/2016 16:08:28 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	7.439	.0000	.0692	.0000	35.12	.0000	.0001	.0061	.0165
Stddev	.0003	.020	.000	.0003	.0001	.18	.000	.0000	.0000	.0002
%RSD	534.6	.2716	611.2	.4558	1531.	.5153	76.22	78.07	.4377	1.296
#1	.0001	7.460	.0001	.0693	.0000	35.28	-.0001	.0000	.0061	.0167
#2	.0004	7.438	-.0003	.0693	.0001	35.16	.0000	.0001	.0062	.0163
#3	-.0003	7.420	.0001	.0688	.0000	34.93	.0000	.0000	.0061	.0165

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0276	1.200	.1147	.0001	.0368	9.209	-.0002	-.0004	.0070	.0067
Stddev	.0015	.012	.0049	.0000	.0001	.056	.0001	.0001	.0007	.0015
%RSD	5.394	.9638	4.274	22.48	.2401	.6079	58.75	14.56	9.825	23.11
#1	.0288	1.203	.1193	.0001	.0368	9.239	-.0003	-.0005	.0071	.0077
#2	.0280	1.187	.1153	.0000	.0369	9.243	-.0002	-.0005	.0062	.0049
#3	.0259	1.209	.1095	.0001	.0367	9.145	-.0001	-.0004	.0076	.0073

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.6860	.0003	.4792	.0035	.0007	.0007	.0021
Stddev	.0117	.0001	.0023	.0003	.0004	.0002	.0000
%RSD	1.706	32.02	.4897	8.854	50.37	32.24	.8932
#1	.6952	.0003	.4801	.0037	.0005	.0005	.0021
#2	.6899	.0004	.4809	.0032	.0012	.0009	.0021
#3	.6728	.0002	.4765	.0037	.0005	.0007	.0021

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2549.2	6141.1	49273.	4381.5
Stddev	8.6	7.0	78.	37.3
%RSD	.33890	.11359	.15884	.85108
#1	2539.3	6133.2	49263.	4344.2
#2	2555.5	6143.8	49355.	4381.6
#3	2552.7	6146.3	49200.	4418.8

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/23/2016 16:12:36 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2523	39.98	1.974	2.013	2.029	40.06	2.027	2.017	2.060	2.021
Stddev	.0015	.17	.006	.008	.008	.20	.005	.004	.004	.004
%RSD	.5774	.4238	.2857	.3775	.3770	.4977	.2367	.2010	.1732	.1783
#1	.2512	39.84	1.980	2.010	2.028	39.99	2.030	2.019	2.060	2.017
#2	.2540	39.92	1.973	2.007	2.021	39.91	2.030	2.019	2.064	2.023
#3	.2517	40.17	1.969	2.021	2.037	40.29	2.022	2.012	2.056	2.022
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	42.02	40.78	40.29	2.051	2.029	42.11	2.003	2.001	1.985	1.987
Stddev	.22	.17	.26	.005	.003	.16	.003	.002	.001	.004
%RSD	.5337	.4287	.6424	.2332	.1331	.3786	.1521	.1127	.0411	.2208
#1	41.97	40.77	40.18	2.048	2.026	42.21	2.006	2.004	1.985	1.991
#2	41.83	40.61	40.10	2.057	2.032	41.93	2.003	2.000	1.984	1.987
#3	42.27	40.96	40.58	2.049	2.029	42.20	2.000	2.000	1.985	1.982
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.209	2.023	2.093	2.102	2.016	2.050	2.023
Stddev	.003	.003	.007	.005	.007	.002	.004
%RSD	.1511	.1393	.3602	.2399	.3511	.1121	.2194
#1	2.212	2.026	2.093	2.099	2.022	2.050	2.025
#2	2.210	2.022	2.085	2.108	2.008	2.052	2.026
#3	2.206	2.021	2.100	2.099	2.018	2.048	2.017
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/23/2016 16:12:36 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2256.2	5815.7	46815.	4276.1
Stddev	2.7	6.7	215.	35.9
%RSD	.11936	.11485	.45854	.84016
#1	2257.8	5816.7	47046.	4275.9
#2	2257.8	5808.6	46621.	4312.1
#3	2253.1	5821.8	46778.	4240.2

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/23/2016 16:16:33 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	-.0016	.0008	.0008	.0006	.0143	.0003	.0002	.0004
Stddev	.0002	.0074	.0002	.0001	.0001	.0023	.0001	.0001	.0003
%RSD	75.60	458.7	19.20	14.94	11.86	16.03	35.62	63.97	69.32
#1	-.0004	.0062	.0010	.0007	.0007	.0146	.0004	.0003	.0003
#2	-.0001	-.0084	.0007	.0007	.0006	.0165	.0004	.0002	.0007
#3	-.0002	-.0026	.0009	.0009	.0006	.0119	.0002	.0001	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0007	.0343	-.0923	.0004	.0005	F.0021	-.2350	.0004	.0000
Stddev	.0002	.0053	.0080	.0098	.0000	.0007	.0007	.0001	.000
%RSD	28.31	15.36	8.680	2761.	6.007	31.04	.2991	31.52	2351.
#1	.0008	.0404	-.0880	.0010	.0005	.0028	-.2347	.0005	.0002
#2	.0009	.0307	-.0874	-.0097	.0005	.0021	-.2358	.0003	.0001
#3	.0005	.0319	-.1016	.0098	.0005	.0014	-.2345	.0003	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0016	-.0013	-.0064	.0003	.0006	.0016	.0002	.0004	.0007
Stddev	.0005	.0006	.0002	.0003	.0002	.0000	.0007	.0001	.0001
%RSD	28.94	44.87	2.372	88.77	26.41	1.767	396.1	32.86	16.82
#1	.0019	-.0007	-.0066	.0006	.0006	.0017	-.0002	.0006	.0008
#2	.0011	-.0018	-.0063	.0002	.0007	.0017	.0009	.0004	.0006
#3	.0017	-.0015	-.0063	.0001	.0004	.0016	-.0002	.0003	.0006
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/23/2016 16:16:33 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2646.3	6077.8	49001.	4298.7
Stddev	4.0	7.8	166.	3.3
%RSD	.15109	.12802	.33843	.07691
#1	2643.0	6084.0	49165.	4301.8
#2	2645.2	6069.1	48834.	4295.2
#3	2650.8	6080.4	49005.	4299.2

Zoom In Zoom Out

Sample Name: MP30384-D1 Acquired: 5/23/2016 16:20:44 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0002	7.404	-.0003	.0683	.0000	34.92	.0000	-.0002	.0060	.0168
Stddev	.0005	.049	.0009	.0005	.000	.12	.0000	.0001	.0003	.0002
%RSD	218.9	.6599	257.4	.7029	116.0	.3355	605.3	33.52	4.659	1.119
#1	-.0005	7.429	-.0008	.0687	-.0001	35.04	.0000	-.0002	.0057	.0170
#2	.0003	7.347	.0007	.0677	.0000	34.81	.0000	-.0002	.0060	.0168
#3	-.0005	7.434	-.0009	.0685	.0000	34.89	.0001	-.0003	.0063	.0166

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0189	1.166	.1233	.0001	.0369	9.138	-.0001	.0000	.0077	.0071
Stddev	.0020	.011	.0154	.0000	.0001	.037	.0001	.0003	.0009	.0006
%RSD	10.48	.9460	12.51	18.71	.1986	.4062	155.3	4154.	11.57	8.132
#1	.0191	1.160	.1074	.0001	.0370	9.180	.0001	.0002	.0068	.0071
#2	.0208	1.178	.1244	.0001	.0369	9.123	-.0002	-.0003	.0086	.0077
#3	.0168	1.158	.1382	.0001	.0369	9.111	-.0001	.0001	.0077	.0065

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.6827	.0001	.4733	.0036	-.0005	.0010	.0029
Stddev	.0072	.0003	.0019	.0002	.0006	.0002	.0000
%RSD	1.051	254.5	.3992	4.564	121.1	24.37	1.702
#1	.6777	.0004	.4754	.0038	-.0009	.0007	.0029
#2	.6909	-.0001	.4718	.0037	-.0008	.0010	.0029
#3	.6795	.0000	.4728	.0034	.0002	.0012	.0030

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2544.9	6118.6	49493.	4351.1
Stddev	4.8	11.5	239.	27.4
%RSD	.18748	.18874	.48266	.62877
#1	2547.9	6124.2	49521.	4319.9
#2	2539.4	6105.3	49716.	4370.8
#3	2547.5	6126.1	49241.	4362.7

Zoom In Zoom Out

Sample Name: MP30384-SD1 Acquired: 5/23/2016 16:24:52 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0009	7.677	-.0020	.0700	-.0001	36.21	-.0001	-.0004	.0067	.0173
Stddev	.0022	.099	.0022	.0002	.0003	.06	.0001	.0006	.0008	.0014
%RSD	258.0	1.293	108.9	.2419	183.0	.1739	198.4	143.1	11.21	7.891
#1	.0014	7.686	-.0018	.0701	-.0004	36.26	-.0002	-.0006	.0076	.0160
#2	-.0009	7.574	.0001	.0698	-.0001	36.22	.0001	.0003	.0061	.0187
#3	-.0031	7.772	-.0042	.0699	.0001	36.14	-.0001	-.0008	.0066	.0170

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0037	.7110	.1503	-.0002	.0364	8.376	-.0003	-.0016	.0033	-.0014
Stddev	.0113	.1450	.0736	.0001	.0001	.016	.0008	.0008	.0018	.0024
%RSD	306.9	20.40	48.98	29.01	.3892	.1849	301.0	54.06	53.69	176.5
#1	.0140	.7720	.1074	-.0002	.0363	8.386	-.0011	-.0025	.0024	-.0010
#2	.0056	.8156	.1081	-.0003	.0364	8.384	.0004	-.0014	.0054	.0008
#3	-.0085	.5454	.2352	-.0003	.0366	8.359	.0000	-.0008	.0022	-.0039

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.7070	.0001	.4862	.0043	-.0010	.0008	.0428
Stddev	.0531	.0001	.0013	.0004	.0018	.0010	.0004
%RSD	7.516	63.70	.2578	9.063	180.0	121.9	.8387
#1	.6755	.0002	.4874	.0043	.0010	.0012	.0433
#2	.6772	.0001	.4864	.0039	-.0024	.0016	.0426
#3	.7684	.0000	.4849	.0047	-.0017	-.0003	.0427

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2636.5	6131.1	50056.	4410.1
Stddev	2.3	18.1	191.	4.6
%RSD	.08597	.29601	.38194	.10356
#1	2638.2	6134.3	49871.	4415.3
#2	2637.3	6147.4	50253.	4408.5
#3	2633.9	6111.5	50043.	4406.6

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: MP30384-S1 Acquired: 5/23/2016 16:28:59 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0479	34.25	1.967	2.144	.0523	60.25	.0502	.5002	.2127	.2741
Stddev	.0005	.09	.002	.008	.0002	.12	.0000	.0013	.0006	.0009
%RSD	.9472	.2659	.1065	.3648	.4427	.1937	.0362	.2606	.2987	.3440
#1	.0484	34.35	1.967	2.152	.0524	60.37	.0501	.4992	.2132	.2750
#2	.0475	34.19	1.969	2.136	.0520	60.26	.0501	.4997	.2128	.2731
#3	.0477	34.20	1.965	2.144	.0525	60.13	.0502	.5017	.2120	.2742

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	25.77	26.77	24.95	.5209	.5142	35.38	.5036	.4924	.5051	1.991
Stddev	.06	.08	.02	.0007	.0012	.09	.0015	.0009	.0003	.008
%RSD	.2482	.3013	.0957	.1265	.2353	.2675	.2949	.1854	.0671	.4175
#1	25.80	26.84	24.97	.5216	.5133	35.41	.5029	.4914	.5048	1.982
#2	25.70	26.68	24.95	.5203	.5138	35.27	.5025	.4926	.5050	1.992
#3	25.81	26.80	24.92	.5208	.5156	35.45	.5053	.4932	.5055	1.999

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.6774	.4922	.9643	.5027	1.982	.4760	.5026
Stddev	.0044	.0006	.0031	.0023	.001	.0008	.0011
%RSD	.6517	.1189	.3186	.4629	.0422	.1627	.2233
#1	.6806	.4921	.9664	.5015	1.983	.4769	.5022
#2	.6724	.4918	.9607	.5054	1.982	.4755	.5017
#3	.6793	.4929	.9656	.5013	1.981	.4757	.5038

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2379.5	6016.0	48133.	4400.0
Stddev	2.9	7.8	118.	8.2
%RSD	.12062	.13018	.24412	.18547
#1	2376.8	6014.8	48003.	4397.3
#2	2382.5	6024.3	48230.	4409.2
#3	2379.3	6008.8	48167.	4393.6

Zoom In Zoom Out

Sample Name: MP30384-S2 Acquired: 5/23/2016 16:32:57 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0471	33.82	1.928	2.117	.0520	59.56	.0495	.4941	.2128	.2726
Stddev	.0003	.10	.006	.004	.0001	.08	.0001	.0005	.0008	.0008
%RSD	.7201	.2859	.3296	.1682	.1436	.1364	.2503	.0966	.3794	.2965
#1	.0474	33.73	1.924	2.113	.0520	59.52	.0495	.4937	.2135	.2720
#2	.0471	33.80	1.925	2.118	.0519	59.50	.0495	.4940	.2119	.2735
#3	.0467	33.92	1.936	2.120	.0520	59.65	.0497	.4947	.2128	.2723

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	25.69	26.61	24.83	.5168	.5074	35.45	.4950	.4883	.4957	1.951
Stddev	.08	.02	.12	.0004	.0006	.09	.0005	.0011	.0008	.003
%RSD	.3284	.0876	.4756	.0854	.1144	.2653	.1005	.2243	.1551	.1396
#1	25.59	26.63	24.97	.5173	.5072	35.56	.4945	.4893	.4950	1.948
#2	25.73	26.59	24.74	.5165	.5069	35.39	.4952	.4884	.4965	1.953
#3	25.74	26.61	24.79	.5165	.5080	35.41	.4954	.4871	.4955	1.953

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.6716	.4826	.9628	.4997	1.973	.4700	.4953
Stddev	.0083	.0014	.0004	.0006	.004	.0006	.0009
%RSD	1.237	.2984	.0444	.1169	.2230	.1343	.1776
#1	.6650	.4815	.9627	.4998	1.975	.4693	.4942
#2	.6809	.4820	.9633	.5002	1.968	.4702	.4956
#3	.6688	.4842	.9625	.4990	1.975	.4705	.4959

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2376.7	6043.9	47862.	4339.5
Stddev	2.6	13.6	138.	10.7
%RSD	.10957	.22460	.28929	.24551
#1	2378.8	6058.7	47836.	4327.9
#2	2377.4	6040.8	48011.	4348.8
#3	2373.8	6032.1	47738.	4341.8

Zoom In Zoom Out

Sample Name: FA33931-2L Acquired: 5/23/2016 16:36:54 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0002	10.86	-.0003	.0769	-.0001	55.67	-.0001	-.0001	.0113	.0259
Stddev	.0004	.01	.0003	.0002	.0001	.15	.0000	.0000	.0003	.0004
%RSD	226.5	.0936	136.9	.2339	76.63	.2672	22.06	42.97	2.521	1.642
#1	-.0006	10.88	-.0005	.0771	-.0001	55.83	-.0001	-.0001	.0114	.0262
#2	.0003	10.86	-.0004	.0768	-.0001	55.65	-.0001	-.0001	.0110	.0261
#3	-.0003	10.86	.0001	.0767	.0000	55.54	.0000	-.0001	.0115	.0254

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0395	1.905	.1167	.0001	.0442	10.61	-.0001	-.0004	.0067	.0102
Stddev	.0028	.023	.0068	.0000	.0002	.05	.0001	.0001	.0004	.0015
%RSD	7.054	1.204	5.857	3.940	.3445	.4783	92.28	25.55	6.117	14.85
#1	.0423	1.884	.1088	.0001	.0440	10.67	.0000	-.0005	.0071	.0090
#2	.0367	1.930	.1205	.0001	.0443	10.59	-.0002	-.0003	.0066	.0119
#3	.0396	1.900	.1208	.0001	.0443	10.58	-.0001	-.0003	.0063	.0097

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.7735	.0005	.6101	.0014	.0002	.0012	.0030
Stddev	.0096	.0001	.0021	.0001	.0004	.0003	.0001
%RSD	1.235	29.93	.3481	4.256	174.1	23.25	2.760
#1	.7625	.0003	.6124	.0013	.0006	.0009	.0030
#2	.7795	.0006	.6098	.0014	-.0002	.0014	.0030
#3	.7786	.0006	.6082	.0014	.0003	.0011	.0031

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2499.3	6091.4	49088.	4362.4
Stddev	4.8	6.8	90.	22.2
%RSD	.19276	.11244	.18376	.50811
#1	2498.3	6095.4	49070.	4343.9
#2	2504.5	6095.2	49185.	4356.5
#3	2495.0	6083.5	49008.	4387.0

Zoom In Zoom Out

Sample Name: FA33931-3L Acquired: 5/23/2016 16:41:01 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0005	13.13	-.0001	.0814	-.0001	65.33	-.0001	-.0001	.0101	.0315
Stddev	.0004	.07	.0003	.0002	.0001	.31	.0000	.0001	.0000	.0003
%RSD	80.84	.5165	230.3	.2132	67.87	.4817	23.70	74.07	.1938	.8068
#1	-.0009	13.16	.0000	.0816	.0000	65.65	-.0001	-.0002	.0100	.0317
#2	-.0002	13.17	-.0004	.0813	-.0002	65.32	-.0001	.0000	.0101	.0312
#3	-.0003	13.05	.0001	.0814	-.0001	65.02	-.0001	-.0002	.0101	.0315

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0057	2.211	.1334	.0001	.0471	10.57	-.0001	.0006	.0061	.0108
Stddev	.0004	.030	.0060	.0000	.0002	.07	.0000	.0006	.0009	.0006
%RSD	6.352	1.351	4.476	37.39	.5088	.6413	44.50	99.63	13.91	5.420
#1	.0053	2.245	.1397	.0000	.0469	10.64	-.0001	-.0001	.0065	.0107
#2	.0058	2.199	.1278	.0001	.0472	10.56	-.0002	.0008	.0068	.0102
#3	.0060	2.189	.1329	.0000	.0473	10.50	-.0001	.0011	.0052	.0114

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.375	.0004	.7268	.0013	.0004	.0019	.0056
Stddev	.010	.0001	.0033	.0002	.0002	.0001	.0001
%RSD	.7516	20.41	.4601	16.03	43.84	3.301	2.322
#1	1.373	.0003	.7303	.0011	.0003	.0018	.0058
#2	1.386	.0005	.7263	.0015	.0006	.0019	.0056
#3	1.365	.0004	.7237	.0013	.0003	.0020	.0055

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2493.8	6110.1	48656.	4371.0
Stddev	2.7	11.8	132.	34.4
%RSD	.10731	.19259	.27231	.78705
#1	2492.7	6116.1	48703.	4331.2
#2	2496.9	6117.7	48758.	4391.1
#3	2491.9	6096.6	48506.	4390.6

Zoom In Zoom Out

Sample Name: FA33931-4L Acquired: 5/23/2016 16:45:07 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	5.949	.0000	.0729	-.0001	38.03	.0000	.0000	.0064	.0106
Stddev	.0000	.014	.001	.0001	.0001	.07	.000	.000	.0002	.0001
%RSD	49.41	.2263	13030.	.1613	104.2	.1890	97.63	389.0	2.955	1.300
#1	.0000	5.961	-.0005	.0729	.0000	38.07	-.0001	.0001	.0063	.0107
#2	.0001	5.935	-.0002	.0728	-.0002	37.94	.0000	.0000	.0066	.0104
#3	.0001	5.951	.0007	.0730	-.0001	38.07	.0000	-.0001	.0062	.0106

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0122	1.124	.1381	.0000	.0413	10.58	.0000	-.0002	.0053	.0118
Stddev	.0025	.019	.0205	.0000	.0001	.01	.0001	.0005	.0007	.0017
%RSD	20.26	1.695	14.86	328.6	.2026	.0822	1634.	254.6	13.12	14.28
#1	.0119	1.103	.1448	.0000	.0412	10.58	-.0001	.0002	.0046	.0127
#2	.0099	1.138	.1544	.0000	.0413	10.57	.0000	-.0007	.0055	.0098
#3	.0148	1.133	.1151	.0001	.0414	10.58	.0002	-.0001	.0059	.0128

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.9588	-.0001	.5751	.0034	.0000	.0015	.0018
Stddev	.0044	.0002	.0017	.0002	.0006	.0001	.0000
%RSD	.4639	342.5	.3038	5.331	5395.	8.799	1.708
#1	.9548	-.0002	.5762	.0032	-.0004	.0014	.0018
#2	.9635	-.0001	.5731	.0036	.0007	.0015	.0018
#3	.9579	.0001	.5761	.0034	-.0002	.0016	.0018

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2540.8	6084.3	49308.	4415.4
Stddev	4.1	7.4	111.	20.4
%RSD	.16107	.12198	.22585	.46268
#1	2544.7	6087.6	49433.	4438.9
#2	2536.5	6089.6	49275.	4406.2
#3	2541.0	6075.8	49218.	4401.3

Zoom In Zoom Out

Sample Name: FA33931-5L Acquired: 5/23/2016 16:49:14 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	5.782	-.0001	.0798	-.0001	37.59	.0000	-.0002	.0071	.0082
Stddev	.0000	.032	.0004	.0001	.0000	.10	.000	.0001	.0002	.0001
%RSD	222.0	.5441	536.6	.1568	37.82	.2714	101.1	53.63	3.387	1.035
#1	.0000	5.796	.0004	.0799	-.0001	37.64	-.0001	-.0003	.0070	.0082
#2	.0000	5.746	-.0003	.0797	-.0001	37.48	.0000	-.0002	.0074	.0082
#3	.0000	5.803	-.0004	.0797	-.0001	37.66	.0000	-.0001	.0069	.0081

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	-.0009	1.413	.1208	.0000	.0437	10.80	.0001	-.0003	.0064	.0122
Stddev	.0013	.029	.0155	.000	.0001	.06	.0002	.0004	.0002	.0004
%RSD	146.7	2.040	12.84	22.03	.2454	.5334	136.5	162.7	3.253	3.044
#1	-.0005	1.386	.1222	.0000	.0436	10.84	.0003	-.0007	.0062	.0123
#2	-.0024	1.443	.1047	.0000	.0437	10.73	.0000	.0001	.0063	.0125
#3	.0002	1.409	.1356	.0000	.0438	10.83	.0001	-.0001	.0066	.0118

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.8052	-.0001	.5983	.0009	.0002	.0017	.0023
Stddev	.0118	.0001	.0016	.0001	.0004	.0002	.0000
%RSD	1.470	270.4	.2609	6.783	197.6	10.81	1.674
#1	.8083	.0001	.6000	.0009	-.0003	.0016	.0023
#2	.8151	-.0001	.5969	.0009	.0004	.0019	.0023
#3	.7921	-.0002	.5980	.0008	.0004	.0015	.0022

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2539.1	6079.8	49318.	4401.3
Stddev	5.4	14.5	106.	57.7
%RSD	.21275	.23859	.21539	1.3120
#1	2535.7	6073.3	49241.	4444.1
#2	2545.3	6096.4	49273.	4424.1
#3	2536.3	6069.8	49439.	4335.6

Zoom In Zoom Out

Sample Name: FA33931-6L Acquired: 5/23/2016 16:53:22 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0003	2.728	-.0005	.0689	-.0001	25.37	.0000	-.0001	.0042	.0024
Stddev	.0003	.009	.0002	.0002	.0001	.10	.000	.0000	.0002	.0002
%RSD	93.10	.3429	48.21	.3369	80.61	.4079	103.4	30.47	3.856	6.819
#1	-.0005	2.734	-.0004	.0690	-.0002	25.37	.0000	-.0001	.0044	.0023
#2	.0000	2.718	-.0003	.0687	-.0001	25.26	-.0001	-.0001	.0041	.0026
#3	-.0004	2.734	-.0008	.0691	.0000	25.47	-.0001	-.0002	.0041	.0023

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	-.0001	.6471	.1492	.0000	.0292	10.20	-.0002	-.0007	.0043	.0080
Stddev	.0009	.0151	.0177	.000	.0001	.08	.0002	.0003	.0013	.0005
%RSD	879.2	2.336	11.85	1010.	.2619	.7394	86.27	35.58	29.10	6.605
#1	.0006	.6359	.1682	.0000	.0293	10.20	.0000	-.0005	.0029	.0077
#2	-.0011	.6411	.1459	.0000	.0292	10.12	-.0004	-.0010	.0051	.0086
#3	.0002	.6643	.1334	.0000	.0291	10.27	-.0002	-.0007	.0049	.0078

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.9268	-.0002	.4632	.0009	.0000	.0020	.0022
Stddev	.0048	.0001	.0035	.0000	.0010	.0002	.0000
%RSD	.5202	35.00	.7580	4.476	18200.	10.64	1.153
#1	.9323	-.0003	.4634	.0008	-.0011	.0020	.0022
#2	.9251	-.0001	.4596	.0009	.0001	.0018	.0022
#3	.9231	-.0002	.4666	.0009	.0010	.0022	.0022

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2566.9	6100.3	49343.	4339.9
Stddev	7.0	15.4	185.	14.3
%RSD	.27396	.25172	.37555	.32901
#1	2564.8	6094.1	49300.	4324.0
#2	2574.7	6117.8	49183.	4351.7
#3	2561.1	6089.0	49546.	4343.9

Zoom In Zoom Out

Sample Name: FA33931-7L Acquired: 5/23/2016 16:57:30 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	8.493	-.0005	.0660	-.0001	42.31	.0000	-.0001	.0066	.0216
Stddev	.0003	.032	.0008	.0002	.0000	.11	.000	.0001	.0002	.0003
%RSD	358.0	.3814	155.9	.3196	1.339	.2670	60.61	64.59	3.524	1.593
#1	-.0002	8.479	-.0007	.0660	-.0001	42.31	.0000	-.0001	.0068	.0212
#2	.0002	8.471	-.0011	.0658	-.0001	42.20	-.0001	.0000	.0064	.0216
#3	-.0003	8.530	.0003	.0662	-.0001	42.43	.0000	-.0001	.0068	.0219

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	-.0015	1.886	.0540	.0000	.0376	16.52	-.0001	-.0003	.0060	.0047
Stddev	.0025	.021	.0218	.000	.0002	.06	.0002	.0003	.0000	.0005
%RSD	162.1	1.097	40.44	147.9	.5169	.3440	182.0	118.1	.3896	10.44
#1	.0005	1.910	.0718	.0000	.0373	16.58	-.0002	-.0004	.0060	.0049
#2	-.0009	1.879	.0604	.0000	.0376	16.46	-.0003	-.0006	.0060	.0041
#3	-.0042	1.870	.0296	.0000	.0377	16.53	.0001	.0001	.0060	.0050

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.9434	.0002	.4955	.0009	-.0004	.0013	.0020
Stddev	.0088	.0002	.0007	.0001	.0006	.0001	.0000
%RSD	.9330	92.93	.1479	8.356	141.3	6.057	2.404
#1	.9386	.0004	.4961	.0008	.0001	.0013	.0020
#2	.9380	.0000	.4947	.0009	-.0004	.0014	.0019
#3	.9535	.0003	.4956	.0009	-.0011	.0014	.0020

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2513.4	6063.9	49284.	4439.4
Stddev	.8	7.5	197.	29.0
%RSD	.02995	.12395	.39903	.65283
#1	2512.9	6072.3	49109.	4415.0
#2	2514.3	6061.6	49245.	4471.4
#3	2513.0	6057.8	49497.	4431.7

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/23/2016 17:01:38 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2505	40.05	1.985	2.002	2.004	40.07	2.021	2.013	2.021	2.011
Stddev	.0008	.14	.001	.003	.007	.13	.001	.001	.006	.006
%RSD	.3105	.3441	.0664	.1719	.3686	.3316	.0377	.0528	.2803	.2894
#1	.2513	39.95	1.986	1.999	1.999	40.04	2.022	2.014	2.024	2.017
#2	.2503	40.20	1.984	2.006	2.013	40.22	2.020	2.012	2.024	2.009
#3	.2498	39.98	1.986	2.001	2.002	39.95	2.021	2.013	2.014	2.006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.35	40.43	39.92	2.024	2.028	41.61	2.009	1.985	1.988	1.991
Stddev	.14	.08	.16	.005	.004	.13	.002	.003	.001	.003
%RSD	.3359	.1997	.4006	.2272	.2064	.3168	.0966	.1451	.0597	.1433
#1	41.20	40.42	39.87	2.024	2.025	41.63	2.010	1.984	1.987	1.993
#2	41.47	40.52	40.10	2.029	2.027	41.73	2.007	1.988	1.989	1.993
#3	41.38	40.36	39.80	2.019	2.033	41.47	2.010	1.982	1.989	1.988
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.218	2.043	2.068	2.069	2.004	2.042	2.017
Stddev	.000	.004	.008	.002	.005	.005	.002
%RSD	.0197	.1691	.3845	.0723	.2395	.2613	.0848
#1	2.218	2.043	2.062	2.068	1.998	2.044	2.017
#2	2.218	2.040	2.077	2.070	2.005	2.046	2.015
#3	2.219	2.047	2.066	2.070	2.008	2.036	2.018
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/23/2016 17:01:38 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2264.8	5808.2	47521.	4356.6
Stddev	1.7	3.3	238.	13.3
%RSD	.07335	.05612	.50088	.30502
#1	2266.7	5809.6	47580.	4342.6
#2	2263.5	5810.5	47258.	4358.2
#3	2264.2	5804.5	47723.	4369.0

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/23/2016 17:05:34 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0134	.0005	.0004	.0004	.0115	.0002	.0002	.0002
Stddev	.0001	.0039	.0003	.0001	.0000	.0033	.0001	.0001	.0003
%RSD	174.9	29.24	67.59	13.29	12.13	28.33	46.28	34.87	104.3
#1	.0001	.0171	.0008	.0003	.0003	.0079	.0003	.0003	.0005
#2	-.0002	.0093	.0007	.0004	.0004	.0143	.0002	.0001	.0002
#3	-.0001	.0139	.0001	.0004	.0004	.0122	.0001	.0002	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0007	.0335	-.0950	.0071	.0004	F.0021	-.2530	.0004	-.0001
Stddev	.0002	.0066	.0014	.0115	.0001	.0006	.0039	.0001	.0005
%RSD	30.31	19.58	1.460	162.2	15.23	26.85	1.545	22.49	675.9
#1	.0009	.0411	-.0949	.0137	.0004	.0027	-.2491	.0003	-.0001
#2	.0005	.0301	-.0936	.0137	.0004	.0020	-.2569	.0004	-.0006
#3	.0006	.0293	-.0964	-.0062	.0003	.0016	-.2530	.0005	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0013	-.0008	-.0064	.0004	.0004	.0017	.0001	.0002	.0006
Stddev	.0006	.0012	.0001	.0003	.0001	.0002	.0003	.0002	.0001
%RSD	47.98	154.7	1.780	66.98	15.70	13.89	226.3	97.37	14.86
#1	.0017	.0006	-.0062	.0005	.0003	.0019	-.0002	.0000	.0006
#2	.0016	-.0013	-.0064	.0006	.0004	.0016	.0003	.0001	.0007
#3	.0006	-.0016	-.0065	.0001	.0005	.0014	.0003	.0003	.0005
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/23/2016 17:05:34 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2633.0	6024.3	49042.	4298.3
Stddev	7.3	16.9	124.	34.9
%RSD	.27587	.28031	.25255	.81088
#1	2632.3	6030.4	49168.	4277.2
#2	2640.5	6037.2	49037.	4279.2
#3	2626.1	6005.1	48921.	4338.5

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: FA33931-8L Acquired: 5/23/2016 17:09:45 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0005	12.04	.0000	.0635	-.0001	53.54	.0000	-.0001	.0069	.0255
Stddev	.0001	.03	.0008	.0000	.0001	.04	.000	.0000	.0001	.0004
%RSD	30.82	.2247	3786.	.0698	118.5	.0755	64.47	11.04	1.631	1.466
#1	-.0003	12.07	.0008	.0636	-.0002	53.58	.0000	.0000	.0070	.0259
#2	-.0006	12.01	.0001	.0635	.0000	53.50	-.0001	-.0001	.0068	.0252
#3	-.0005	12.04	-.0008	.0635	-.0001	53.54	.0000	.0000	.0069	.0254

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	.0047	2.045	.0697	.0000	.0406	19.97	.0000	-.0002	.0064	.0059
Stddev	.0013	.009	.0197	.0000	.0001	.01	.000	.0002	.0004	.0007
%RSD	28.21	.4496	28.28	61.27	.2674	.0401	1361.	130.5	5.792	11.52
#1	.0062	2.050	.0913	.0000	.0404	19.98	.0001	.0000	.0062	.0059
#2	.0044	2.035	.0653	.0000	.0406	19.97	-.0001	-.0004	.0069	.0066
#3	.0036	2.052	.0526	.0001	.0407	19.96	.0000	-.0001	.0062	.0052

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	.8774	.0006	.5466	.0015	-.0004	.0016	.0067
Stddev	.0085	.0001	.0011	.0001	.0004	.0001	.0000
%RSD	.9710	20.31	.1981	4.798	95.84	4.506	.4793
#1	.8754	.0006	.5476	.0014	-.0007	.0015	.0067
#2	.8700	.0004	.5454	.0014	.0000	.0016	.0066
#3	.8867	.0006	.5467	.0015	-.0004	.0016	.0067

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2489.2	6051.2	48756.	4419.8
Stddev	8.8	18.0	289.	23.6
%RSD	.35360	.29804	.59191	.53333
#1	2497.5	6069.0	48463.	4402.4
#2	2490.2	6051.8	49040.	4410.4
#3	2480.0	6032.9	48765.	4446.7

Zoom In Zoom Out

Sample Name: FA33931-9L Acquired: 5/23/2016 17:13:50 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	9.491	.0010	.0160	-.0001	3.291	.0000	-.0002	.0088	.0213
Stddev	.0004	.046	.0008	.0004	.0000	.021	.000	.0001	.0002	.0001
%RSD	557.3	.4885	80.08	2.222	40.60	.6301	455.8	61.52	2.647	.6641
#1	-.0006	9.517	.0019	.0162	-.0001	3.292	.0000	-.0001	.0088	.0214
#2	.0002	9.519	.0007	.0156	-.0001	3.310	.0000	-.0003	.0089	.0212
#3	.0001	9.438	.0004	.0163	.0000	3.269	.0000	-.0001	.0085	.0212

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	.0035	2.469	.0465	.0000	.0498	72.98	.0000	-.0016	.0066	.0050
Stddev	.0021	.034	.0055	.000	.0000	.35	.0001	.0006	.0006	.0003
%RSD	58.95	1.389	11.75	374.9	.0786	.4839	1619.	36.95	9.087	6.984
#1	.0059	2.508	.0413	.0000	.0498	73.26	.0000	-.0013	.0067	.0054
#2	.0022	2.447	.0459	.0000	.0498	73.09	-.0001	-.0023	.0072	.0048
#3	.0024	2.451	.0522	-.0001	.0497	72.58	.0001	-.0013	.0060	.0048

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	1.032	.0002	.1693	.0003	-.0014	.0022	.0027
Stddev	.002	.0002	.0007	.0001	.0004	.0002	.0002
%RSD	.2234	108.3	.4273	23.02	29.56	10.34	7.759
#1	1.031	.0005	.1697	.0003	-.0010	.0021	.0025
#2	1.030	.0001	.1697	.0002	-.0014	.0020	.0029
#3	1.034	.0000	.1684	.0003	-.0018	.0024	.0027

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2479.2	6072.5	49446.	4486.4
Stddev	1.9	8.6	150.	41.7
%RSD	.07491	.14081	.30360	.93046
#1	2477.5	6080.6	49425.	4450.8
#2	2481.2	6073.2	49308.	4476.1
#3	2478.9	6063.6	49606.	4532.4

Zoom In Zoom Out

Sample Name: FA33931-10L Acquired: 5/23/2016 17:17:57 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	.0379	-.0005	.0616	-.0001	32.46	.0000	.0000	.0421	.0118
Stddev	.0005	.0151	.0001	.0003	.0000	.12	.000	.000	.0001	.0001
%RSD	517.0	39.93	13.83	.4546	28.46	.3703	110.1	113.0	.1217	.9991
#1	.0005	.0331	-.0005	.0616	-.0001	32.58	.0000	-.0001	.0421	.0118
#2	-.0004	.0257	-.0005	.0619	-.0001	32.45	-.0001	.0000	.0421	.0120
#3	.0001	.0548	-.0004	.0613	-.0001	32.34	.0000	.0000	.0420	.0117

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	.0064	.6646	1.301	.0567	.0123	9.155	.0010	-.0001	.0024	-.0008
Stddev	.0005	.0017	.007	.0001	.0001	.028	.0001	.0004	.0002	.0019
%RSD	7.592	.2496	.5047	.1641	1.153	.3018	9.758	524.7	7.850	231.3
#1	.0068	.6639	1.306	.0568	.0124	9.183	.0010	.0003	.0022	-.0013
#2	.0059	.6664	1.293	.0568	.0122	9.155	.0012	-.0004	.0026	-.0024
#3	.0066	.6633	1.303	.0566	.0125	9.128	.0010	-.0002	.0024	.0013

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	1.104	-.0001	.1179	.0010	-.0002	-.0001	.0070
Stddev	.001	.0002	.0007	.0001	.0003	.0001	.0001
%RSD	.0738	132.7	.6358	7.053	172.4	154.3	1.138
#1	1.105	-.0003	.1188	.0010	-.0004	.0001	.0070
#2	1.104	-.0001	.1177	.0009	-.0003	-.0001	.0070
#3	1.103	.0000	.1173	.0010	.0002	-.0001	.0071

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2582.0	6035.6	49443.	4382.2
Stddev	5.4	4.5	350.	40.9
%RSD	.20760	.07434	.70774	.93328
#1	2582.5	6039.6	49847.	4353.3
#2	2587.1	6036.5	49241.	4364.3
#3	2576.4	6030.8	49240.	4429.0

Zoom In Zoom Out

Sample Name: MP30384-MB2 Acquired: 5/23/2016 17:22:03 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	-.0010	-.0005	.0008	-.0001	.2915	.0000	-.0001	.0013	.0000
Stddev	.000	.0172	.0003	.0003	.0000	.0046	.000	.0001	.0002	.000
%RSD	5218.	1759.	76.28	37.05	22.07	1.562	1430.	84.60	14.60	501.5
#1	-.0004	-.0102	-.0002	.0010	-.0001	.2968	.0000	.0000	.0011	-.0001
#2	.0004	-.0116	-.0004	.0005	-.0001	.2893	.0000	-.0001	.0014	.0001
#3	.0000	.0188	-.0008	.0010	-.0001	.2885	.0000	-.0002	.0014	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0013	-.0264	.0749	.0001	-.0004	.7109	.0000	-.0009	-.0009	-.0014
Stddev	.0027	.0166	.0099	.0000	.0001	.0064	.000	.0003	.0009	.0005
%RSD	208.5	62.99	13.23	6.822	16.30	.9042	1307.	30.82	107.1	31.67
#1	-.0010	-.0116	.0833	.0001	-.0004	.7105	-.0001	-.0008	-.0017	-.0010
#2	.0042	-.0232	.0774	.0001	-.0003	.7047	.0000	-.0007	.0001	-.0019
#3	.0007	-.0444	.0640	.0001	-.0005	.7175	.0001	-.0012	-.0009	-.0014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0882	-.0004	.0001	.0000	-.0012	.0000	.0088
Stddev	.0014	.0002	.0001	.0000	.0002	.000	.0000
%RSD	1.532	50.32	37.21	50.97	20.43	318.8	.2393
#1	.0871	-.0004	.0002	.0000	-.0014	.0001	.0088
#2	.0879	-.0002	.0001	.0000	-.0013	-.0002	.0088
#3	.0897	-.0006	.0001	.0000	-.0009	.0000	.0088
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: MP30384-MB2 Acquired: 5/23/2016 17:22:03 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2689.4	6159.9	50907.	4414.0
Stddev	2.2	2.4	174.	60.8
%RSD	.08278	.03860	.34086	1.3774
#1	2688.2	6157.7	50790.	4344.0
#2	2688.1	6159.7	51106.	4445.1
#3	2692.0	6162.4	50824.	4453.0

Zoom In Zoom Out

Sample Name: MP30384-B2 Acquired: 5/23/2016 17:26:13 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0478	26.83	1.982	2.065	.0515	25.70	.0508	.5067	.2041	.2555
Stddev	.0005	.02	.003	.004	.0003	.02	.0001	.0010	.0003	.0011
%RSD	.9682	.0925	.1602	.1726	.4956	.0664	.2005	.1879	.1361	.4179
#1	.0481	26.83	1.979	2.069	.0515	25.69	.0507	.5056	.2038	.2549
#2	.0480	26.80	1.984	2.063	.0517	25.70	.0509	.5070	.2040	.2568
#3	.0472	26.85	1.985	2.064	.0512	25.72	.0509	.5075	.2044	.2549
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.67	25.44	24.95	.5154	.4836	26.89	.5137	.4876	.5011	2.007
Stddev	.05	.06	.05	.0005	.0013	.03	.0016	.0009	.0011	.003
%RSD	.2091	.2463	.1911	.0929	.2789	.1174	.3172	.1934	.2207	.1658
#1	25.72	25.51	25.00	.5149	.4821	26.92	.5119	.4865	.5001	2.004
#2	25.61	25.39	24.92	.5158	.4840	26.86	.5143	.4882	.5023	2.006
#3	25.68	25.42	24.93	.5154	.4847	26.88	.5150	.4879	.5008	2.010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1040	.5052	.4865	.4922	1.979	.4713	.5135
Stddev	.0126	.0021	.0010	.0006	.003	.0007	.0011
%RSD	12.15	.4161	.2063	.1182	.1627	.1581	.2190
#1	.0984	.5032	.4873	.4918	1.977	.4712	.5123
#2	.1185	.5050	.4868	.4929	1.976	.4721	.5143
#3	.0951	.5074	.4854	.4919	1.982	.4707	.5141
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP30384-B2 Acquired: 5/23/2016 17:26:13 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2428.1	5989.1	49097.	4433.8
Stddev	5.0	14.1	125.	30.6
%RSD	.20568	.23587	.25500	.69021
#1	2433.5	6004.1	49184.	4437.9
#2	2427.0	5987.1	49152.	4462.1
#3	2423.7	5976.1	48953.	4401.3

Zoom In Zoom Out

Sample Name: MP30385-MB1 Acquired: 5/23/2016 17:30:11 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	-.0019	-.0005	-.0001	-.0001	.0130	.0000	-.0001	.0006	.0002
Stddev	.0003	.0013	.0008	.0002	.0001	.0011	.0000	.0001	.0002	.0004
%RSD	168.0	67.24	147.6	259.2	66.90	8.281	3129.	118.6	39.55	163.3
#1	-.0003	-.0028	.0001	.0001	-.0002	.0134	.0000	-.0001	.0009	.0000
#2	-.0004	-.0024	-.0003	-.0003	-.0001	.0137	.0000	.0000	.0004	.0007
#3	.0002	-.0004	-.0014	.0000	.0000	.0117	.0000	-.0002	.0005	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0193	-.0854	.0098	.0001	-.0001	-.2628	.0003	.0003	-.0010	.0009
Stddev	.0004	.0300	.0170	.0000	.0001	.0063	.0001	.0005	.0005	.0008
%RSD	2.217	35.13	174.3	18.27	77.51	2.397	47.13	184.6	48.39	92.97
#1	.0196	-.0698	.0053	.0001	.0000	-.2569	.0001	.0007	-.0014	.0018
#2	.0196	-.1200	.0286	.0001	-.0001	-.2620	.0004	.0003	-.0013	.0003
#3	.0189	-.0665	-.0046	.0001	-.0003	-.2694	.0004	-.0002	-.0005	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0023	.0223	.0000	.0002	-.0006	.0001	.0005
Stddev	.0001	.0003	.000	.0002	.0003	.0002	.0000
%RSD	6.134	1.175	332.3	68.33	58.12	185.1	9.949
#1	-.0021	.0222	-.0001	.0004	-.0002	.0000	.0004
#2	-.0023	.0226	.0000	.0002	-.0006	.0004	.0005
#3	-.0024	.0222	.0001	.0001	-.0009	-.0001	.0005
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: MP30385-MB1 Acquired: 5/23/2016 17:30:11 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2743.7	6186.5	51777.	4541.3
Stddev	6.6	10.2	396.	7.7
%RSD	.23942	.16474	.76573	.17028
#1	2749.8	6189.0	51433.	4535.6
#2	2744.6	6195.1	51688.	4538.1
#3	2736.8	6175.2	52210.	4550.1

Zoom In Zoom Out

Sample Name: MP30385-B1 Acquired: 5/23/2016 17:34:22 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0469	26.23	1.940	2.023	.0507	24.87	.0499	.4992	.2015	.2550
Stddev	.0006	.11	.006	.003	.0001	.08	.0001	.0015	.0008	.0009
%RSD	1.266	.4080	.2913	.1457	.1311	.3351	.2366	.3095	.3958	.3337
#1	.0466	26.21	1.934	2.023	.0507	24.90	.0498	.4978	.2021	.2559
#2	.0475	26.14	1.942	2.020	.0508	24.78	.0499	.4989	.2006	.2549
#3	.0465	26.35	1.945	2.026	.0506	24.93	.0500	.5008	.2019	.2542
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	24.98	24.69	24.35	.5083	.4799	25.44	.5049	.4773	.4864	1.957
Stddev	.06	.03	.01	.0011	.0014	.08	.0008	.0016	.0041	.008
%RSD	.2477	.1077	.0297	.2107	.2974	.3071	.1544	.3426	.8366	.3867
#1	25.04	24.72	24.35	.5085	.4784	25.43	.5040	.4755	.4819	1.948
#2	24.92	24.67	24.34	.5071	.4802	25.36	.5051	.4775	.4875	1.959
#3	25.00	24.68	24.36	.5092	.4812	25.52	.5055	.4787	.4899	1.963
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0040	.5150	.4799	.4879	1.947	.4656	.4943
Stddev	.0005	.0011	.0009	.0008	.007	.0003	.0006
%RSD	13.60	.2087	.1912	.1584	.3653	.0719	.1259
#1	.0043	.5138	.4804	.4883	1.941	.4658	.4939
#2	.0042	.5158	.4789	.4870	1.947	.4652	.4940
#3	.0033	.5155	.4805	.4883	1.955	.4657	.4950
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP30385-B1 Acquired: 5/23/2016 17:34:22 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2449.9	6049.3	49454.	4470.2
Stddev	2.6	2.0	118.	31.4
%RSD	.10409	.03386	.23951	.70317
#1	2447.1	6048.7	49351.	4436.0
#2	2450.6	6051.6	49584.	4497.9
#3	2452.0	6047.6	49428.	4476.7

Zoom In Zoom Out

Sample Name: FA34154-3 Acquired: 5/23/2016 17:38:19 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0012	128.4	.0272	.3945	.0016	107.1	.0017	.0132	.2226	.1228
Stddev	.0001	.3	.0014	.0013	.0000	.2	.0000	.0001	.0005	.0003
%RSD	5.714	.2610	4.986	.3410	2.482	.1872	1.447	.6237	.2078	.2516
#1	.0013	128.6	.0270	.3951	.0015	107.2	.0017	.0132	.2221	.1231
#2	.0013	128.6	.0260	.3954	.0016	107.2	.0017	.0131	.2230	.1228
#3	.0012	128.0	.0287	.3929	.0016	106.9	.0017	.0133	.2227	.1224

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	72.79	1.955	4.852	.3404	.0047	.0071	.0557	2.033	-.0003	.0015
Stddev	.28	.026	.028	.0009	.0001	.0146	.0001	.006	.0003	.0013
%RSD	.3851	1.351	.5799	.2564	1.472	206.1	.0963	.3031	79.40	87.18
#1	73.08	1.967	4.842	.3394	.0048	.0227	.0556	2.034	-.0006	.0018
#2	72.79	1.974	4.830	.3410	.0046	-.0063	.0557	2.027	-.0001	.0001
#3	72.52	1.925	4.884	.3408	.0048	.0049	.0557	2.039	-.0004	.0027

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.746	.0184	.1073	.9480	-.0007	.1531	1.968
Stddev	.004	.0003	.0004	.0015	.0009	.0004	.003
%RSD	.1987	1.835	.3368	.1575	121.2	.2561	.1426
#1	1.746	.0185	.1075	.9464	-.0009	.1534	1.965
#2	1.742	.0188	.1074	.9493	.0002	.1531	1.969
#3	1.749	.0181	.1068	.9485	-.0015	.1527	1.970

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2414.9	6543.8	52175.	4823.7
Stddev	3.2	18.0	128.	33.7
%RSD	.13139	.27554	.24489	.69948
#1	2417.5	6563.8	52311.	4784.8
#2	2416.0	6528.9	52057.	4843.2
#3	2411.4	6538.6	52158.	4843.3

Zoom In Zoom Out

Sample Name: MP30385-D1 Acquired: 5/23/2016 17:42:22 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0015	156.7	.0314	.4831	.0019	115.9	.0020	.0159	.2432	.1330
Stddev	.0002	.2	.0005	.0006	.0000	.3	.0000	.0001	.0007	.0006
%RSD	14.34	.1034	1.434	.1207	1.900	.2900	1.344	.4836	.2694	.4384
#1	.0017	156.8	.0314	.4837	.0020	116.2	.0020	.0160	.2438	.1329
#2	.0013	156.5	.0310	.4826	.0019	115.6	.0020	.0159	.2433	.1337
#3	.0014	156.8	.0319	.4831	.0019	116.0	.0020	.0159	.2425	.1326

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	78.78	2.545	5.872	.3808	.0037	.1012	.0631	2.401	-.0016	.0034
Stddev	.25	.007	.041	.0001	.0001	.0042	.0001	.003	.0005	.0009
%RSD	.3189	.2773	.7040	.0335	2.895	4.192	.1435	.1420	29.74	26.04
#1	79.07	2.552	5.916	.3809	.0036	.0998	.0630	2.397	-.0020	.0031
#2	78.63	2.542	5.834	.3810	.0036	.1060	.0631	2.403	-.0019	.0028
#3	78.64	2.539	5.865	.3807	.0038	.0978	.0632	2.403	-.0011	.0044

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.842	.0191	.1246	1.074	-.0028	.1824	1.979
Stddev	.002	.0001	.0002	.001	.0005	.0005	.004
%RSD	.0959	.6581	.1212	.1000	17.46	.2662	.2055
#1	1.844	.0191	.1248	1.073	-.0027	.1820	1.977
#2	1.840	.0189	.1246	1.075	-.0033	.1824	1.977
#3	1.843	.0192	.1245	1.073	-.0023	.1829	1.984

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2402.8	6615.0	53544.	4984.3
Stddev	2.9	8.1	117.	52.6
%RSD	.12045	.12174	.21865	1.0556
#1	2404.3	6619.0	53420.	4923.7
#2	2404.5	6620.2	53653.	5010.7
#3	2399.4	6605.7	53558.	5018.4

Zoom In Zoom Out

Sample Name: MP30385-SD1 Acquired: 5/23/2016 17:46:24 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0006	145.3	.0310	.4453	.0013	122.2	.0019	.0155	.2502	.1408
Stddev	.0004	.3	.0004	.0007	.0003	.2	.0003	.0003	.0014	.0007
%RSD	54.84	.1830	1.248	.1650	21.43	.1757	16.83	1.732	.5764	.5264
#1	.0006	145.4	.0307	.4455	.0014	122.3	.0015	.0154	.2517	.1400
#2	.0010	145.5	.0309	.4458	.0016	122.4	.0021	.0153	.2488	.1414
#3	.0003	145.0	.0314	.4444	.0010	122.0	.0019	.0158	.2501	.1410

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	83.08	1.851	5.734	.3880	.0023	-.9889	.0657	2.202	-.0068	.0007
Stddev	.07	.162	.175	.0006	.0004	.0179	.0009	.008	.0026	.0036
%RSD	.0794	8.771	3.060	.1472	19.06	1.805	1.319	.3502	38.35	519.6
#1	83.11	1.734	5.768	.3886	.0020	-.9909	.0653	2.196	-.0040	.0033
#2	83.13	1.782	5.544	.3880	.0022	-.9701	.0651	2.200	-.0092	-.0034
#3	83.00	2.036	5.890	.3874	.0028	-1.006	.0667	2.211	-.0072	.0022

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.979	.0219	.1207	1.057	.0005	.1720	2.347
Stddev	.003	.0009	.0003	.001	.0023	.0017	.006
%RSD	.1743	3.895	.2815	.0848	478.3	1.001	.2637
#1	1.981	.0213	.1211	1.056	.0001	.1740	2.341
#2	1.975	.0229	.1206	1.058	-.0016	.1711	2.347
#3	1.981	.0217	.1205	1.056	.0029	.1709	2.353

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2553.8	6263.9	51088.	4580.8
Stddev	8.2	16.6	144.	20.2
%RSD	.32184	.26487	.28161	.44093
#1	2563.1	6283.0	51093.	4563.2
#2	2547.6	6254.9	50942.	4576.3
#3	2550.6	6253.8	51229.	4602.8

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/23/2016 17:50:29 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2504	40.14	2.000	1.996	1.989	40.09	2.024	2.020	2.010	2.001
Stddev	.0003	.10	.005	.002	.004	.07	.003	.003	.003	.006
%RSD	.1390	.2597	.2654	.0887	.2030	.1838	.1572	.1487	.1341	.3250
#1	.2500	40.03	1.994	1.995	1.986	40.03	2.021	2.017	2.007	1.996
#2	.2506	40.19	2.002	1.996	1.988	40.07	2.026	2.022	2.013	1.998
#3	.2505	40.22	2.004	1.998	1.994	40.17	2.027	2.022	2.010	2.008

Check ? Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.05	40.34	39.83	2.024	2.042	41.55	2.026	1.989	1.998	2.004
Stddev	.03	.07	.13	.002	.008	.04	.004	.008	.006	.005
%RSD	.0750	.1694	.3267	.0793	.4013	.1057	.2104	.4016	.3263	.2394
#1	41.02	40.30	39.68	2.022	2.033	41.54	2.021	1.986	1.990	1.999
#2	41.06	40.30	39.93	2.025	2.044	41.52	2.028	1.983	2.000	2.008
#3	41.08	40.42	39.88	2.025	2.049	41.60	2.030	1.998	2.002	2.005

Check ? Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.234	2.071	2.055	2.062	2.012	2.047	2.023
Stddev	.005	.006	.003	.002	.006	.003	.004
%RSD	.2304	.2779	.1594	.1063	.2905	.1211	.1856
#1	2.228	2.065	2.053	2.059	2.009	2.045	2.019
#2	2.236	2.074	2.054	2.062	2.008	2.046	2.025
#3	2.237	2.075	2.059	2.064	2.019	2.050	2.025

Check ? None Chk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/23/2016 17:50:29 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2247.5	5750.1	47226.	4309.9
Stddev	11.1	21.6	213.	11.4
%RSD	.49281	.37492	.45112	.26466
#1	2255.4	5774.2	47469.	4316.3
#2	2252.3	5743.4	47069.	4296.7
#3	2234.8	5732.7	47141.	4316.6

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/23/2016 17:54:27 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0049	.0005	.0004	.0003	.0106	.0002	.0001	.0004
Stddev	.0001	.0014	.0005	.0001	.0000	.0012	.0001	.0000	.0002
%RSD	268.8	29.45	107.7	20.79	6.216	10.89	34.24	6.162	49.36
#1	.0001	.0051	.0011	.0003	.0004	.0106	.0002	.0001	.0002
#2	-.0001	.0033	.0002	.0004	.0003	.0118	.0002	.0001	.0004
#3	-.0001	.0062	.0001	.0004	.0003	.0095	.0001	.0001	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	.0288	-.1127	.0197	.0003	F.0020	-.2606	.0003	.0003
Stddev	.0003	.0051	.0195	.0147	.0000	.0006	.0043	.0002	.0007
%RSD	49.21	17.86	17.26	74.57	8.834	29.15	1.642	71.93	278.2
#1	.0009	.0335	-.0938	.0288	.0003	.0026	-.2625	.0003	.0008
#2	.0005	.0295	-.1118	.0274	.0004	.0019	-.2557	.0005	-.0005
#3	.0003	.0233	-.1326	.0028	.0003	.0014	-.2635	.0001	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	-.0005	-.0069	.0003	.0003	.0014	-.0003	.0004	.0005
Stddev	.0020	.0014	.0003	.0003	.0001	.0001	.0003	.0002	.0001
%RSD	457.5	261.7	4.943	92.76	31.40	3.699	99.16	51.58	17.77
#1	.0026	.0000	-.0065	.0003	.0004	.0015	.0000	.0002	.0007
#2	-.0001	.0005	-.0069	.0006	.0003	.0014	-.0003	.0006	.0005
#3	-.0012	-.0021	-.0072	.0000	.0002	.0014	-.0005	.0004	.0005
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/23/2016 17:54:27 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2698.4	6141.3	51462.	4482.2
Stddev	45.8	96.3	354.	10.6
%RSD	1.6971	1.5674	.68867	.23734
#1	2645.7	6030.3	51787.	4477.1
#2	2721.3	6192.1	51516.	4475.2
#3	2728.3	6201.5	51084.	4494.5

Zoom In Zoom Out

Sample Name: MP30385-PS1 Acquired: 5/23/2016 17:58:39 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0436	128.2	.1208	.6357	.0490	109.5	.0475	.0590	.2630	.2193
Stddev	.0003	.5	.0005	.0019	.0001	.4	.0000	.0001	.0003	.0003
%RSD	.7521	.4202	.3963	.2984	.2915	.3796	.1037	.1674	.0981	.1391
#1	.0432	128.3	.1213	.6371	.0489	109.5	.0475	.0590	.2633	.2190
#2	.0437	127.6	.1203	.6335	.0489	109.0	.0475	.0591	.2629	.2193
#3	.0438	128.6	.1207	.6364	.0491	109.8	.0476	.0589	.2628	.2196

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	73.97	11.35	9.279	.3798	.0932	9.815	.1458	2.053	.0972	.0927
Stddev	.12	.04	.082	.0003	.0001	.038	.0001	.004	.0007	.0014
%RSD	.1591	.3815	.8803	.0822	.1039	.3860	.0401	.2155	.7212	1.460
#1	74.07	11.38	9.298	.3796	.0933	9.833	.1457	2.058	.0978	.0937
#2	73.84	11.30	9.190	.3801	.0931	9.772	.1458	2.052	.0964	.0911
#3	74.01	11.37	9.350	.3796	.0932	9.842	.1458	2.049	.0974	.0932

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.735	.0616	.1499	1.025	.0958	.1944	2.158
Stddev	.004	.0003	.0004	.002	.0002	.0002	.003
%RSD	.2612	.4174	.2473	.1906	.2272	.0805	.1213
#1	1.738	.0618	.1502	1.024	.0960	.1943	2.155
#2	1.730	.0613	.1495	1.027	.0958	.1945	2.159
#3	1.738	.0617	.1500	1.025	.0955	.1946	2.161

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2386.7	6551.1	52272.	4936.3
Stddev	4.8	4.6	149.	35.7
%RSD	.19917	.07091	.28563	.72330
#1	2382.9	6555.0	52140.	4898.6
#2	2385.2	6552.3	52241.	4940.8
#3	2392.1	6546.0	52434.	4969.6

Zoom In Zoom Out

Sample Name: MP30385-S1 Acquired: 5/23/2016 18:02:37 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0458	188.7	1.713	2.343	.0480	129.4	.0456	.4504	.4389	.3811
Stddev	.0003	.3	.003	.003	.0003	.4	.0001	.0004	.0010	.0005
%RSD	.6686	.1758	.1449	.1141	.5490	.3316	.2222	.0962	.2200	.1210
#1	.0457	188.8	1.716	2.346	.0479	129.6	.0455	.4504	.4388	.3806
#2	.0461	189.0	1.712	2.344	.0483	129.7	.0457	.4499	.4379	.3815
#3	.0455	188.3	1.712	2.341	.0477	128.9	.0457	.4507	.4399	.3811

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	153.4	25.31	27.29	.9717	.3968	23.61	.5056	3.062	.1176	1.725
Stddev	.3	.10	.16	.0008	.0005	.06	.0002	.003	.0019	.005
%RSD	.1861	.4000	.5712	.0872	.1227	.2497	.0392	.0994	1.625	.2855
#1	153.6	25.42	27.33	.9724	.3973	23.64	.5056	3.062	.1197	1.729
#2	153.5	25.26	27.42	.9708	.3966	23.65	.5053	3.065	.1172	1.720
#3	153.1	25.24	27.12	.9719	.3964	23.54	.5057	3.059	.1160	1.726

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.019	.4253	.5690	1.353	1.862	.6164	2.464
Stddev	.003	.0005	.0015	.001	.005	.0022	.001
%RSD	.1289	.1122	.2585	.0669	.2599	.3617	.0502
#1	2.022	.4258	.5693	1.352	1.856	.6166	2.464
#2	2.018	.4249	.5703	1.354	1.866	.6140	2.466
#3	2.017	.4251	.5674	1.352	1.863	.6185	2.464

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2327.3	6555.9	51957.	4947.0
Stddev	1.7	4.9	334.	42.3
%RSD	.07174	.07450	.64341	.85447
#1	2328.6	6561.2	51809.	4902.0
#2	2325.4	6555.0	52339.	4953.3
#3	2327.9	6551.5	51722.	4985.8

Zoom In Zoom Out

Sample Name: MP30385-S2 Acquired: 5/23/2016 18:06:35 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0453	202.8	1.676	2.356	.0482	147.1	.0449	.4442	.4788	.3817
Stddev	.0002	.8	.002	.010	.0003	.7	.0000	.0004	.0005	.0002
%RSD	.4516	.4115	.1425	.4381	.5304	.4456	.0604	.0945	.0980	.0550
#1	.0453	203.6	1.675	2.367	.0485	147.8	.0449	.4441	.4788	.3817
#2	.0452	201.9	1.675	2.346	.0480	146.5	.0449	.4439	.4794	.3820
#3	.0456	202.9	1.679	2.355	.0480	147.0	.0448	.4447	.4784	.3816

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	109.3	25.51	28.15	.8683	.3879	23.71	.4997	3.305	.1110	1.696
Stddev	.5	.13	.10	.0032	.0002	.13	.0005	.009	.0010	.004
%RSD	.4812	.5183	.3675	.3632	.0393	.5575	.0965	.2667	.9347	.2047
#1	109.9	25.66	28.27	.8648	.3881	23.85	.5001	3.296	.1112	1.692
#2	108.8	25.42	28.09	.8693	.3878	23.59	.4992	3.306	.1098	1.697
#3	109.2	25.45	28.10	.8709	.3878	23.68	.4998	3.313	.1119	1.699

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.018	.4129	.5790	1.473	1.899	.6238	2.505
Stddev	.004	.0007	.0022	.005	.004	.0018	.001
%RSD	.1969	.1626	.3800	.3314	.2009	.2900	.0566
#1	2.015	.4136	.5810	1.468	1.898	.6219	2.506
#2	2.016	.4127	.5766	1.474	1.897	.6242	2.504
#3	2.022	.4123	.5794	1.477	1.904	.6255	2.506

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2298.9	6689.6	52248.	4960.6
Stddev	1.4	7.6	213.	50.6
%RSD	.06024	.11341	.40790	1.0204
#1	2300.5	6680.8	52494.	4903.3
#2	2298.2	6693.9	52123.	4979.4
#3	2298.0	6694.0	52126.	4999.3

Zoom In Zoom Out

Sample Name: FA34154-1 Acquired: 5/23/2016 18:10:33 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0012	127.4	.0283	.4657	.0016	109.3	.0032	.0129	.2972
Stddev	.0003	.3	.0005	.0008	.0001	.2	.0000	.0000	.0009
%RSD	21.52	.2048	1.775	.1618	4.639	.1435	1.311	.0642	.3056
#1	.0014	127.3	.0286	.4660	.0016	109.3	.0032	.0129	.2982
#2	.0009	127.2	.0277	.4648	.0016	109.1	.0032	.0129	.2965
#3	.0013	127.7	.0286	.4662	.0015	109.4	.0033	.0129	.2970

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.4202	80.63	1.628	4.667	.4018	.0075	.0344	.0501	F5.007
Stddev	.0006	.06	.002	.028	.0006	.0002	.0068	.0002	.011
%RSD	.1332	.0757	.1269	.5890	.1374	2.161	19.81	.3161	.2091
#1	.4198	80.67	1.626	4.695	.4023	.0077	.0395	.0500	5.016
#2	.4208	80.56	1.630	4.640	.4018	.0074	.0369	.0501	5.009
#3	.4199	80.67	1.629	4.668	.4012	.0075	.0266	.0503	4.995

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0001	.0028	1.585	.0202	.1160	.6910	-.0005	.1639	2.476
Stddev	.0017	.0026	.002	.0001	.0003	.0006	.0009	.0006	.004
%RSD	1237.	91.48	.1364	.5149	.2789	.0936	187.5	.3852	.1552
#1	.0018	.0013	1.583	.0203	.1163	.6917	-.0015	.1647	2.477
#2	-.0012	.0058	1.586	.0201	.1157	.6910	-.0004	.1637	2.472
#3	-.0011	.0013	1.587	.0203	.1160	.6904	.0004	.1634	2.479

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2423.5	6473.5	51722.	4766.0
Stddev	4.3	14.5	130.	13.6
%RSD	.17949	.22350	.25136	.28492
#1	2418.5	6475.1	51654.	4758.9
#2	2425.1	6487.1	51640.	4757.5
#3	2426.7	6458.3	51872.	4781.7

Zoom In Zoom Out

Sample Name: FA34154-2 Acquired: 5/23/2016 18:14:36 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0014	116.0	.0259	.4387	.0014	123.4	.0024	.0119	.2521
Stddev	.0002	.3	.0007	.0004	.0001	.3	.0000	.0001	.0007
%RSD	17.34	.2720	2.750	.0909	4.245	.2328	1.796	.9596	.2776
#1	.0013	115.7	.0258	.4384	.0014	123.1	.0024	.0119	.2529
#2	.0012	116.1	.0267	.4385	.0013	123.3	.0024	.0121	.2516
#3	.0017	116.3	.0253	.4391	.0014	123.7	.0023	.0119	.2517

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.3548	84.08	1.812	4.949	.5004	.0441	.0651	.0493	F4.157
Stddev	.0010	.19	.017	.023	.0008	.0001	.0091	.0003	.007
%RSD	.2894	.2290	.9091	.4694	.1595	.3190	13.95	.6764	.1606
#1	.3559	84.10	1.793	4.926	.5003	.0442	.0663	.0496	4.165
#2	.3547	83.87	1.823	4.949	.4996	.0440	.0554	.0489	4.153
#3	.3538	84.26	1.821	4.972	.5012	.0439	.0734	.0493	4.154

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0000	.0032	1.827	.0201	.1212	.9390	-.0013	.1500	2.594
Stddev	.0004	.0009	.002	.0003	.0001	.0013	.0004	.0005	.002
%RSD	1027.	27.82	.1322	1.482	.1202	.1393	31.09	.3413	.0726
#1	-.0004	.0026	1.829	.0198	.1214	.9399	-.0018	.1505	2.592
#2	.0004	.0042	1.827	.0202	.1212	.9375	-.0010	.1495	2.595
#3	.0002	.0027	1.824	.0204	.1211	.9396	-.0012	.1500	2.595

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2413.1	6396.4	51220.	4710.7
Stddev	6.0	6.4	22.	38.8
%RSD	.24960	.10013	.04330	.82383
#1	2406.2	6397.9	51243.	4693.5
#2	2417.4	6389.4	51220.	4755.1
#3	2415.6	6402.0	51198.	4683.4

Zoom In Zoom Out

Sample Name: FA34154-4 Acquired: 5/23/2016 18:18:38 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0013	149.5	.0387	F10.20	.0019	214.9	.0027	.0138	.3609
Stddev	.0001	.5	.0003	.12	.0001	2.8	.0000	.0000	.0007
%RSD	7.648	.3239	.7404	1.218	3.425	1.318	1.223	.1541	.2076
#1	.0014	149.6	.0387	10.07	.0020	218.1	.0027	.0138	.3616
#2	.0012	149.0	.0389	10.22	.0019	212.7	.0027	.0138	.3601
#3	.0013	149.9	.0384	10.31	.0020	213.9	.0026	.0138	.3609

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.1756	80.47	2.760	6.617	.5367	.0061	.6268	.0742	3.389
Stddev	.0003	.27	.013	.036	.0012	.0001	.0079	.0003	.003
%RSD	.1786	.3326	.4772	.5509	.2170	.8569	1.266	.3406	.0829
#1	.1753	80.73	2.775	6.638	.5376	.0062	.6250	.0739	3.387
#2	.1756	80.19	2.750	6.575	.5371	.0061	.6200	.0744	3.389
#3	.1759	80.49	2.756	6.638	.5354	.0061	.6355	.0743	3.392

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0003	.0039	1.858	.0126	.3213	F4.382	-.0025	.2119	1.429
Stddev	.0009	.0022	.001	.0003	.0012	.027	.0007	.0003	.002
%RSD	310.5	57.87	.0613	2.632	.3638	.6062	27.84	.1479	.1220
#1	-.0008	.0049	1.856	.0124	.3216	4.375	-.0033	.2122	1.427
#2	.0009	.0054	1.858	.0125	.3200	4.359	-.0019	.2119	1.429
#3	.0008	.0013	1.859	.0130	.3223	4.411	-.0024	.2116	1.431

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2323.1	6511.1	51575.	4811.3
Stddev	3.7	6.5	18.	14.6
%RSD	.15946	.09908	.03570	.30327
#1	2325.5	6518.5	51554.	4803.1
#2	2318.8	6507.5	51589.	4828.1
#3	2324.8	6507.2	51582.	4802.6

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: FA34154-5 Acquired: 5/23/2016 18:23:07 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0019	234.2	.0392	.3252	.0018	13.42	.0001	.0174	.1809	.0266
Stddev	.0002	4.3	.0005	.0007	.0000	.05	.0000	.0001	.0005	.0003
%RSD	8.912	1.827	1.153	.2215	2.117	.3937	52.18	.3885	.2529	1.177
#1	.0020	239.1	.0392	.3260	.0018	13.48	.0000	.0175	.1806	.0269
#2	.0020	231.6	.0388	.3248	.0017	13.38	.0001	.0174	.1815	.0263
#3	.0017	231.8	.0397	.3247	.0018	13.41	.0001	.0173	.1807	.0265

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	102.6	1.993	3.936	.0880	.0037	-.0900	.0628	.3078	-.0024	.0024
Stddev	.4	.021	.004	.0001	.0002	.0013	.0002	.0015	.0020	.0009
%RSD	.3987	1.080	.1144	.1211	4.082	1.427	.3969	.5000	82.54	37.85
#1	103.0	1.993	3.936	.0880	.0036	-.0887	.0628	.3063	-.0028	.0019
#2	102.2	2.014	3.940	.0879	.0038	-.0913	.0626	.3079	-.0003	.0019
#3	102.4	1.971	3.931	.0881	.0038	-.0900	.0631	.3093	-.0042	.0035

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	1.591	.0176	.0477	.9558	-.0019	.2669	.2307
Stddev	.004	.0001	.0001	.0014	.0003	.0004	.0003
%RSD	.2361	.7424	.1704	.1481	14.17	.1514	.1460
#1	1.589	.0175	.0478	.9562	-.0019	.2665	.2307
#2	1.589	.0178	.0477	.9542	-.0016	.2672	.2303
#3	1.596	.0176	.0477	.9569	-.0021	.2671	.2310

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2472.8	6662.5	51724.	4843.2
Stddev	2.8	5.3	44.	66.9
%RSD	.11277	.07984	.08437	1.3804
#1	2472.8	6659.2	51701.	4766.7
#2	2475.6	6668.6	51775.	4890.6
#3	2470.1	6659.7	51697.	4872.1

Zoom In Zoom Out

Sample Name: FA34154-6 Acquired: 5/23/2016 18:27:18 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0013	250.7	.0326	.2666	.0017	46.95	.0001	.0098	.1484	.0161
Stddev	.0003	1.2	.0004	.0002	.0000	.10	.0001	.0001	.0003	.0004
%RSD	21.01	.4709	1.182	.0858	2.217	.2105	50.89	.6829	.2138	2.207
#1	.0012	250.9	.0322	.2664	.0017	46.85	.0002	.0099	.1484	.0159
#2	.0012	249.4	.0330	.2665	.0017	47.05	.0000	.0099	.1481	.0159
#3	.0016	251.7	.0326	.2669	.0017	46.96	.0001	.0098	.1488	.0165

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	101.9	1.349	3.928	.0915	.0058	.0570	.0450	.2288	-.0002	.0138
Stddev	.2	.020	.019	.0001	.0000	.0056	.0001	.0014	.0011	.0023
%RSD	.2186	1.493	.4831	.1091	.1996	9.769	.2189	.6104	643.5	16.40
#1	101.8	1.356	3.926	.0915	.0058	.0632	.0449	.2272	.0010	.0133
#2	101.7	1.365	3.947	.0916	.0058	.0553	.0451	.2299	-.0012	.0163
#3	102.1	1.326	3.910	.0914	.0057	.0524	.0450	.2293	-.0004	.0119

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	2.019	.0191	.1071	.6745	-.0008	.2088	.0741
Stddev	.003	.0002	.0002	.0010	.0006	.0003	.0001
%RSD	.1318	.7933	.1997	.1507	71.39	.1404	.1188
#1	2.016	.0190	.1069	.6737	-.0010	.2085	.0742
#2	2.021	.0192	.1072	.6742	-.0013	.2089	.0740
#3	2.019	.0190	.1073	.6756	-.0002	.2091	.0740

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2436.1	6436.9	50470.	4669.5
Stddev	4.2	7.7	139.	28.3
%RSD	.17225	.11976	.27621	.60558
#1	2437.8	6439.3	50534.	4644.5
#2	2439.3	6443.1	50310.	4663.9
#3	2431.4	6428.2	50565.	4700.2

Zoom In Zoom Out

Sample Name: FA34154-7 Acquired: 5/23/2016 18:31:21 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0010	156.2	.0192	.1598	.0021	15.46	.0000	.0076	.0976	.0205
Stddev	.0004	.2	.0006	.0006	.0001	.00	.000	.0001	.0008	.0001
%RSD	35.15	.1586	3.311	.4042	4.954	.0096	249.1	1.246	.8065	.5346
#1	.0006	156.4	.0189	.1597	.0021	15.46	.0000	.0076	.0984	.0205
#2	.0010	155.9	.0199	.1592	.0023	15.46	-.0001	.0074	.0977	.0204
#3	.0013	156.3	.0188	.1605	.0021	15.46	.0000	.0076	.0968	.0206

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	51.30	1.052	3.032	.0735	.0034	-.0842	.0274	.1939	-.0018	.0027
Stddev	.11	.014	.018	.0001	.0001	.0069	.0001	.0010	.0009	.0022
%RSD	.2171	1.374	.5840	.1708	2.512	8.168	.3665	.4946	49.12	79.13
#1	51.38	1.036	3.049	.0736	.0033	-.0920	.0275	.1932	-.0027	.0004
#2	51.17	1.065	3.034	.0736	.0033	-.0790	.0274	.1935	-.0018	.0047
#3	51.34	1.054	3.013	.0734	.0035	-.0816	.0273	.1950	-.0010	.0031

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	1.947	.0186	.0436	.5752	-.0011	.1383	.0753
Stddev	.000	.0004	.0001	.0005	.0002	.0002	.0002
%RSD	.0114	2.129	.1250	.0829	20.34	.1299	.2407
#1	1.947	.0186	.0437	.5757	-.0013	.1384	.0750
#2	1.946	.0190	.0436	.5747	-.0011	.1385	.0753
#3	1.947	.0182	.0437	.5753	-.0009	.1381	.0754

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2498.1	6570.3	52400.	4767.4
Stddev	4.2	8.8	334.	38.5
%RSD	.16879	.13447	.63661	.80782
#1	2498.0	6568.9	52249.	4748.8
#2	2493.9	6562.2	52168.	4741.6
#3	2502.3	6579.7	52782.	4811.6

Zoom In Zoom Out

Sample Name: FA34145-1 Acquired: 5/23/2016 18:35:24 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0002	4.094	.0070	.4809	.0003	231.7	.0092	.0048	.0853	3.354
Stddev	.0012	.035	.0029	.0026	.0001	.9	.0001	.0003	.0009	.007
%RSD	670.7	.8650	41.37	.5390	52.07	.3785	.7018	6.458	1.083	.2019
#1	-.0003	4.105	.0042	.4839	.0004	232.6	.0093	.0051	.0863	3.360
#2	.0016	4.123	.0100	.4794	.0002	231.0	.0091	.0047	.0848	3.347
#3	-.0007	4.055	.0068	.4795	.0002	231.4	.0092	.0045	.0847	3.355

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	22.49	-.3311	2.109	.2273	-.0007	-1.026	.0330	.2921	.0013	-.0089
Stddev	.19	.1017	.071	.0011	.0002	.029	.0005	.0049	.0020	.0052
%RSD	.8397	30.70	3.347	.4620	23.32	2.844	1.462	1.692	153.0	58.65
#1	22.66	-.3255	2.190	.2283	-.0008	-.9927	.0325	.2945	-.0007	-.0143
#2	22.28	-.2324	2.069	.2275	-.0007	-1.044	.0332	.2954	.0033	-.0038
#3	22.52	-.4355	2.067	.2262	-.0005	-1.043	.0334	.2864	.0014	-.0088

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	.8912	.0429	1.210	.3497	.0016	.0163	1.752
Stddev	.0017	.0009	.005	.0007	.0004	.0011	.002
%RSD	.1954	1.993	.4470	.2037	25.72	6.544	.1054
#1	.8920	.0438	1.216	.3505	.0013	.0168	1.750
#2	.8892	.0428	1.205	.3493	.0015	.0151	1.752
#3	.8924	.0421	1.208	.3493	.0021	.0171	1.753

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2538.5	6014.0	49505.	4416.5
Stddev	3.8	2.3	233.	61.2
%RSD	.15017	.03766	.47137	1.3862
#1	2541.4	6015.9	49748.	4360.3
#2	2534.2	6014.5	49282.	4481.7
#3	2540.0	6011.5	49485.	4407.4

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/23/2016 18:39:30 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2493	40.04	1.992	1.993	1.976	39.97	2.018	2.012	2.004	1.995
Stddev	.0002	.09	.002	.003	.004	.06	.001	.001	.004	.003
%RSD	.0716	.2210	.1092	.1360	.1999	.1623	.0478	.0577	.1950	.1703
#1	.2493	40.03	1.994	1.993	1.976	39.93	2.018	2.012	2.008	1.999
#2	.2492	39.96	1.991	1.990	1.972	39.93	2.016	2.011	2.001	1.994
#3	.2495	40.14	1.990	1.995	1.980	40.05	2.018	2.013	2.002	1.992
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.82	40.33	39.71	2.017	2.034	41.53	2.017	1.979	1.991	1.993
Stddev	.12	.08	.13	.003	.004	.06	.001	.006	.001	.002
%RSD	.2990	.1866	.3225	.1234	.1840	.1451	.0393	.2817	.0351	.0941
#1	40.69	40.25	39.71	2.016	2.031	41.53	2.017	1.975	1.990	1.995
#2	40.84	40.35	39.59	2.016	2.033	41.48	2.016	1.976	1.992	1.992
#3	40.93	40.40	39.84	2.020	2.038	41.60	2.017	1.985	1.991	1.993
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.222	2.060	2.047	2.055	2.000	2.042	2.017
Stddev	.003	.001	.002	.001	.006	.003	.002
%RSD	.1493	.0365	.1176	.0517	.3138	.1318	.0943
#1	2.226	2.061	2.048	2.054	1.998	2.044	2.015
#2	2.222	2.059	2.045	2.054	1.995	2.039	2.016
#3	2.219	2.060	2.049	2.056	2.007	2.042	2.019
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/23/2016 18:39:30 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2264.4	5785.2	47359.	4280.7
Stddev	9.8	10.8	131.	29.6
%RSD	.43418	.18584	.27697	.69248
#1	2272.1	5792.7	47398.	4314.6
#2	2267.7	5790.1	47467.	4268.2
#3	2253.3	5772.9	47213.	4259.4

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/23/2016 18:43:28 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0091	.0003	.0002	.0002	.0062	.0002	.0001
Stddev	.0000	.0048	.0007	.0002	.0001	.0015	.0000	.0001
%RSD	12.52	52.82	214.8	97.73	21.98	24.72	18.99	72.84
#1	.0003	.0123	.0003	.0002	.0002	.0056	.0002	.0002
#2	.0004	.0116	-.0004	.0003	.0003	.0079	.0002	.0000
#3	.0004	.0036	.0011	.0000	.0002	.0051	.0001	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0005	.0267	-.1035	.0260	.0002	F.0020	-.2738
Stddev	.0002	.0001	.0067	.0231	.0177	.0001	.0006	.0142
%RSD	106.9	28.86	25.15	22.34	68.09	23.06	27.97	5.191
#1	.0001	.0004	.0333	-.0788	.0292	.0003	.0026	-.2641
#2	.0005	.0006	.0271	-.1072	.0418	.0002	.0019	-.2672
#3	.0001	.0004	.0198	-.1246	.0069	.0002	.0015	-.2901
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit							.0010	
Low Limit							-.0010	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	F-.0011	.0005	-.0009	-.0064	.0003	.0002	.0013
Stddev	.0001	.0004	.0002	.0003	.0004	.0002	.0000	.0000
%RSD	66.27	32.67	42.16	36.13	5.978	45.80	17.69	3.256
#1	.0001	-.0009	.0006	-.0009	-.0068	.0003	.0001	.0012
#2	.0002	-.0009	.0007	-.0006	-.0060	.0005	.0002	.0013
#3	.0000	-.0016	.0003	-.0013	-.0064	.0002	.0002	.0013
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit		.0010						
Low Limit		-.0010						

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/23/2016 18:43:28 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	.0002	.0001	.0005
Stddev	.0003	.0002	.0001
%RSD	142.3	159.2	10.30
#1	.0001	.0001	.0006
#2	.0000	-.0001	.0005
#3	.0005	.0003	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2632.8	6006.4	49309.	4260.1
Stddev	9.1	13.7	301.	1.7
%RSD	.34551	.22821	.61103	.03891
#1	2623.9	5990.7	49461.	4258.7
#2	2642.1	6016.0	49503.	4261.9
#3	2632.3	6012.5	48962.	4259.5

Zoom In Zoom Out

Sample Name: FA34145-2 Acquired: 5/23/2016 18:47:39 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0013	1.349	-.0020	.0146	-.0005	4.429	.0002	.0023	.0112	.1439
Stddev	.0010	.045	.0065	.0008	.0002	.043	.0002	.0001	.0018	.0001
%RSD	77.33	3.376	321.5	5.430	34.01	.9760	87.40	5.004	16.32	.0454
#1	-.0001	1.297	-.0046	.0138	-.0004	4.392	.0001	.0023	.0095	.1438
#2	-.0019	1.378	.0054	.0154	-.0004	4.477	.0001	.0023	.0131	.1439
#3	-.0020	1.373	-.0068	.0145	-.0007	4.418	.0004	.0025	.0109	.1439

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.5942	-.2812	.0933	.0152	.0002	-.9262	.0070	.0069	-.0023	-.0079
Stddev	.0245	.1543	.0544	.0000	.0008	.0275	.0007	.0013	.0033	.0028
%RSD	4.123	54.88	58.29	.3161	455.9	2.974	9.357	19.21	145.1	35.87
#1	.6225	-.3101	.0320	.0152	.0011	-.8944	.0077	.0083	-.0055	-.0109
#2	.5806	-.1145	.1124	.0152	-.0006	-.9426	.0065	.0057	-.0025	-.0052
#3	.5796	-.4191	.1356	.0151	.0001	-.9416	.0067	.0067	.0011	-.0076

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5092	.0244	.0741	.1273	-.0032	.0015	.1801
Stddev	.0022	.0013	.0005	.0003	.0040	.0004	.0003
%RSD	.4306	5.162	.7329	.1965	124.6	27.54	.1389
#1	.5069	.0240	.0740	.1274	-.0048	.0019	.1798
#2	.5094	.0234	.0736	.1270	.0013	.0016	.1802
#3	.5113	.0258	.0747	.1275	-.0062	.0011	.1803

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2679.5	6157.4	50580.	4390.3
Stddev	1.6	2.1	88.	11.0
%RSD	.05934	.03450	.17338	.25155
#1	2677.7	6156.1	50577.	4383.7
#2	2680.0	6159.9	50495.	4403.0
#3	2680.7	6156.3	50670.	4384.1

Zoom In Zoom Out

Sample Name: FA34104-1 Acquired: 5/23/2016 18:51:48 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	.0013	73.24	.0573	.6479	.0059	F1678.	.0015	.0227
Stddev	.0002	.02	.0006	.0014	.0000	1.	.0000	.0001
%RSD	18.39	.0324	1.055	.2139	.2988	.0795	2.075	.3047
#1	.0012	73.26	.0578	.6495	.0059	1677.	.0014	.0227
#2	.0012	73.21	.0566	.6470	.0059	1679.	.0015	.0228
#3	.0016	73.24	.0576	.6472	.0059	1679.	.0015	.0228

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	.1959	.3111	50.90	6.691	20.22	.7959	.0511	2.516
Stddev	.0005	.0014	.09	.027	.08	.0005	.0001	.003
%RSD	.2514	.4567	.1718	.4056	.3996	.0578	.2455	.1143
#1	.1954	.3126	51.00	6.695	20.14	.7959	.0510	2.515
#2	.1964	.3098	50.85	6.662	20.22	.7964	.0511	2.514
#3	.1959	.3110	50.86	6.715	20.30	.7955	.0512	2.520

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.0744	.1613	.0019	.0038	1.859	.0286	3.076	2.635
Stddev	.0004	.0004	.0010	.0015	.002	.0003	.040	.004
%RSD	.5525	.2523	51.62	38.89	.1308	1.138	1.283	.1411
#1	.0748	.1609	.0030	.0021	1.861	.0289	3.066	2.635
#2	.0740	.1613	.0010	.0046	1.856	.0283	3.043	2.638
#3	.0743	.1617	.0018	.0047	1.859	.0287	3.120	2.631

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	F-.0103	.2166	.7432
Stddev	.0001	.0001	.0019
%RSD	.8782	.0661	.2501
#1	-.0102	.2166	.7454
#2	-.0103	.2168	.7420
#3	-.0104	.2165	.7423

Zoom In Zoom Out

Sample Name: FA34104-1 Acquired: 5/23/2016 18:51:48 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1906.8	6376.1	51215.	5131.3
Stddev	2.2	19.2	84.	23.1
%RSD	.11492	.30185	.16319	.44999
#1	1904.6	6354.1	51215.	5126.9
#2	1906.8	6389.8	51131.	5156.2
#3	1909.0	6384.5	51298.	5110.6

Zoom In Zoom Out

Sample Name: FA34104-2 Acquired: 5/23/2016 18:56:07 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	.0015	71.60	.0566	.6369	.0059	F1520.	.0020	.0230
Stddev	.0001	.17	.0008	.0006	.0000	4.	.0001	.0001
%RSD	8.959	.2434	1.390	.0915	.5981	.2921	3.863	.6244
#1	.0016	71.42	.0562	.6363	.0059	1522.	.0021	.0232
#2	.0013	71.62	.0575	.6369	.0058	1524.	.0019	.0230
#3	.0015	71.76	.0562	.6375	.0059	1515.	.0020	.0229

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	.2034	.3165	50.03	6.234	19.16	.7297	.0538	2.774
Stddev	.0005	.0005	.05	.044	.06	.0014	.0003	.009
%RSD	.2476	.1664	.1014	.7063	.3371	.1921	.5162	.3246
#1	.2037	.3171	49.97	6.219	19.11	.7300	.0535	2.764
#2	.2028	.3162	50.04	6.284	19.23	.7282	.0538	2.779
#3	.2037	.3162	50.07	6.200	19.14	.7309	.0540	2.780

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.0768	.1648	.0024	.0030	1.665	.0285	2.957	2.704
Stddev	.0003	.0006	.0011	.0019	.001	.0006	.058	.012
%RSD	.3340	.3495	44.44	63.77	.0775	1.936	1.961	.4437
#1	.0770	.1654	.0033	.0034	1.664	.0287	2.916	2.691
#2	.0765	.1642	.0027	.0009	1.664	.0290	2.932	2.706
#3	.0770	.1647	.0012	.0046	1.666	.0279	3.023	2.715

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	F-.0103	.2082	.8065
Stddev	.0000	.0004	.0010
%RSD	.3933	.1771	.1296
#1	-.0103	.2087	.8074
#2	-.0103	.2080	.8053
#3	-.0102	.2081	.8067

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: FA34104-2 Acquired: 5/23/2016 18:56:07 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1946.1	6426.2	51252.	5065.5
Stddev	2.8	15.0	128.	9.1
%RSD	.14402	.23418	.25056	.18009
#1	1942.9	6410.3	51120.	5068.8
#2	1947.7	6440.3	51376.	5055.1
#3	1947.8	6428.1	51262.	5072.4

Zoom In Zoom Out

Sample Name: FA34094-1 Acquired: 5/23/2016 19:00:28 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.5816	-.0001	.0100	-.0001	6.974	.0003	-.0001	.0025	.0018
Stddev	.0003	.0092	.0004	.0003	.0001	.046	.0000	.0000	.0004	.0001
%RSD	743.8	1.574	648.6	2.945	136.4	.6656	12.10	41.28	14.21	6.883
#1	-.0003	.5815	.0004	.0102	.0000	7.027	.0003	-.0001	.0022	.0017
#2	.0001	.5725	-.0002	.0101	.0000	6.955	.0002	.0000	.0029	.0019
#3	.0002	.5908	-.0003	.0096	-.0002	6.941	.0003	-.0001	.0024	.0018

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	1.056	-.0382	.1179	.0059	.0001	-.2256	.0010	.0016	-.0006	-.0008
Stddev	.015	.0152	.0079	.0000	.0001	.0066	.0002	.0000	.0005	.0003
%RSD	1.424	39.86	6.727	.5837	86.29	2.925	16.20	2.406	90.76	37.33
#1	1.066	-.0415	.1130	.0059	.0001	-.2331	.0010	.0015	-.0002	-.0009
#2	1.063	-.0516	.1270	.0059	.0002	-.2231	.0008	.0016	-.0004	-.0005
#3	1.038	-.0216	.1136	.0059	.0000	-.2206	.0012	.0016	-.0012	-.0011

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.1813	.0191	.0377	.0716	-.0007	.0011	.0029
Stddev	.0001	.0003	.0003	.0002	.0002	.0002	.0000
%RSD	.0408	1.715	.7240	.2270	29.43	20.46	1.622
#1	.1814	.0188	.0380	.0717	-.0005	.0012	.0028
#2	.1814	.0193	.0378	.0716	-.0006	.0013	.0029
#3	.1812	.0193	.0375	.0714	-.0009	.0009	.0029

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2700.8	6211.9	51182.	4435.6
Stddev	5.5	13.8	214.	40.8
%RSD	.20458	.22151	.41883	.91994
#1	2706.8	6220.0	50964.	4389.5
#2	2699.5	6219.7	51393.	4450.1
#3	2696.0	6196.0	51190.	4467.2

Zoom In Zoom Out

Sample Name: FA34126-1 Acquired: 5/23/2016 19:04:39 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0125	60.72	-.0024	.9052	-.0005	109.7	.0013	3.329	.2127
Stddev	.0019	.11	.0039	.0035	.0011	.1	.0006	.008	.0006
%RSD	15.45	.1791	161.3	.3887	237.1	.0576	42.68	.2503	.2815
#1	.0147	60.62	.0018	.9090	.0008	109.8	.0007	3.326	.2125
#2	.0111	60.84	-.0060	.9020	-.0015	109.7	.0018	3.323	.2133
#3	.0118	60.70	-.0031	.9048	-.0007	109.6	.0015	3.339	.2122

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.3393	71.31	-.1796	3.735	1.693	.0187	2.204	.2182	.0768
Stddev	.0019	.14	.2623	.227	.002	.0010	.142	.0004	.0012
%RSD	.5611	.2014	146.0	6.072	.1321	5.575	6.424	.1714	1.598
#1	.3380	71.18	.0421	3.904	1.694	.0181	2.367	.2185	.0755
#2	.3415	71.46	-.1118	3.477	1.690	.0181	2.134	.2178	.0768
#3	.3385	71.28	-.4691	3.824	1.694	.0199	2.110	.2183	.0780

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0029	-.0178	4.412	3.865	.0951	3.578	.0029	.0513	F56.56
Stddev	.0080	.0046	.009	.007	.0003	.007	.0027	.0006	.16
%RSD	279.8	25.62	.2092	.1927	.2830	.1906	91.07	1.110	.2890
#1	.0052	-.0157	4.401	3.859	.0952	3.585	.0031	.0508	56.47
#2	-.0108	-.0230	4.417	3.864	.0952	3.572	.0055	.0511	56.47
#3	-.0030	-.0147	4.417	3.873	.0947	3.575	.0002	.0519	56.75

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2620.4	6090.8	49795.	4458.4
Stddev	7.1	12.3	152.	23.1
%RSD	.27126	.20208	.30525	.51733
#1	2624.0	6095.7	49711.	4459.5
#2	2625.1	6099.9	49971.	4434.9
#3	2612.2	6076.8	49705.	4481.0

Zoom In Zoom Out

Sample Name: FA34126-2 Acquired: 5/23/2016 19:08:44 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0100	61.24	.0014	.2853	-.0007	131.7	.0008	3.307	.2043
Stddev	.0010	.15	.0073	.0015	.0004	.1	.0001	.008	.0040
%RSD	9.931	.2473	520.3	.5202	59.55	.1025	16.43	.2345	1.963
#1	.0102	61.11	-.0062	.2839	-.0003	131.6	.0010	3.301	.2080
#2	.0109	61.40	.0019	.2869	-.0012	131.9	.0008	3.305	.2048
#3	.0089	61.20	.0085	.2851	-.0007	131.6	.0007	3.316	.2000

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2368	50.21	.7623	4.645	1.670	.0165	3.175	.2091	.0496
Stddev	.0026	.29	.2684	.033	.002	.0009	.019	.0007	.0038
%RSD	1.091	.5705	35.21	.7104	.0949	5.405	.6111	.3114	7.737
#1	.2350	50.10	1.038	4.618	1.669	.0176	3.179	.2084	.0452
#2	.2397	49.99	.5015	4.682	1.669	.0162	3.155	.2091	.0525
#3	.2356	50.53	.7477	4.635	1.672	.0159	3.193	.2097	.0510

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0019	-.0106	4.486	3.813	.1321	3.441	.0004	.0482	F67.34
Stddev	.0073	.0124	.012	.004	.0004	.007	.0060	.0020	.15
%RSD	375.1	117.4	.2604	.1139	.2948	.1915	1353.	4.069	.2211
#1	-.0084	-.0089	4.477	3.809	.1317	3.434	-.0057	.0504	67.21
#2	-.0033	-.0238	4.483	3.812	.1321	3.447	.0064	.0469	67.29
#3	.0059	.0009	4.499	3.817	.1325	3.442	.0007	.0472	67.50

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2619.2	6110.3	50358.	4454.8
Stddev	1.6	7.9	190.	48.9
%RSD	.06255	.12960	.37791	1.0988
#1	2619.5	6118.0	50277.	4403.2
#2	2620.7	6110.9	50575.	4500.6
#3	2617.4	6102.2	50222.	4460.6

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: FA34126-3 Acquired: 5/23/2016 19:12:49 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0306	86.57	.0220	F111.3	-.0006	103.9	.0258	2.826	12.41
Stddev	.0016	.20	.0031	.8	.0009	.2	.0001	.006	.05
%RSD	5.192	.2282	14.03	.7408	140.4	.1477	.4775	.2161	.4370
#1	.0297	86.65	.0220	110.4	-.0004	103.9	.0259	2.819	12.35
#2	.0297	86.72	.0189	111.9	.0001	104.1	.0257	2.828	12.44
#3	.0324	86.35	.0251	111.7	-.0017	103.8	.0258	2.831	12.45

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2882	96.72	5.835	28.65	3.502	.0718	2.261	.0805	3.651
Stddev	.0038	.51	.226	.33	.012	.0008	.073	.0005	.013
%RSD	1.313	.5252	3.872	1.158	.3273	1.146	3.232	.6012	.3598
#1	.2926	96.14	5.834	29.00	3.489	.0714	2.200	.0809	3.647
#2	.2862	97.11	5.609	28.34	3.505	.0712	2.342	.0800	3.640
#3	.2859	96.90	6.061	28.60	3.511	.0727	2.240	.0807	3.665

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0004	-.0203	1.836	.2653	1.829	3.070	.0008	.0218	F40.04
Stddev	.0095	.0083	.008	.0021	.003	.010	.0056	.0023	.08
%RSD	2241.	40.99	.4577	.7880	.1706	.3180	711.3	10.75	.2043
#1	.0114	-.0164	1.834	.2649	1.826	3.059	.0061	.0242	39.95
#2	-.0054	-.0299	1.828	.2634	1.832	3.078	.0013	.0195	40.05
#3	-.0048	-.0147	1.845	.2675	1.829	3.074	-.0051	.0217	40.11

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2586.0	6080.1	49607.	4358.1
Stddev	7.6	18.0	407.	20.8
%RSD	.29372	.29576	.82062	.47815
#1	2594.0	6100.8	49974.	4340.1
#2	2585.1	6069.5	49678.	4380.9
#3	2578.9	6069.9	49169.	4353.2

Zoom In Zoom Out

Sample Name: FA34126-4 Acquired: 5/23/2016 19:17:03 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0110	55.22	.0412	F100.9	-.0007	209.9	.1280	1.601	F40.69
Stddev	.0028	.21	.0001	1.5	.0009	1.0	.0008	.002	.04
%RSD	25.37	.3754	.3033	1.536	131.7	.4652	.6186	.1398	.0935
#1	.0118	55.44	.0412	100.3	-.0007	211.0	.1272	1.599	40.65
#2	.0133	55.18	.0411	99.75	.0002	209.2	.1288	1.603	40.71
#3	.0079	55.03	.0413	102.7	-.0015	209.4	.1280	1.603	40.71

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.3361	411.0	15.82	17.42	3.913	.0167	.6128	.1936	11.10
Stddev	.0014	.7	.12	.07	.002	.0021	.1060	.0023	.02
%RSD	.4142	.1818	.7586	.4174	.0523	12.35	17.30	1.199	.1825
#1	.3346	411.4	15.79	17.39	3.914	.0143	.6006	.1944	11.10
#2	.3373	411.5	15.94	17.37	3.910	.0182	.5134	.1953	11.08
#3	.3365	410.2	15.71	17.50	3.914	.0176	.7243	.1909	11.12

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0058	-.0334	1.249	.1634	1.539	1.987	.0000	-.0024	F123.1
Stddev	.0058	.0046	.002	.0030	.005	.004	.004	.0024	.2
%RSD	100.6	13.77	.1323	1.853	.3324	.1954	14040.	102.5	.1295
#1	-.0001	-.0387	1.250	.1668	1.545	1.990	.0042	-.0052	123.0
#2	.0059	-.0309	1.247	.1622	1.536	1.982	-.0016	-.0011	123.0
#3	.0116	-.0306	1.248	.1612	1.537	1.989	-.0027	-.0008	123.3

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2561.4	5980.0	50000.	4417.1
Stddev	5.5	4.2	149.	16.7
%RSD	.21576	.07015	.29782	.37753
#1	2555.7	5975.2	50094.	4415.7
#2	2566.8	5982.7	50077.	4434.4
#3	2561.7	5982.2	49828.	4401.1

Zoom In Zoom Out

Sample Name: MP30386-MB1 Acquired: 5/23/2016 19:21:17 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0034	-.0015	.0003	-.0001	.0179	.0000	-.0001	.0006	.0004
Stddev	.0002	.0079	.0002	.0001	.0000	.0016	.0000	.0001	.0002	.0002
%RSD	111.4	234.2	11.53	16.31	40.89	9.166	302.5	59.41	24.56	57.18
#1	.0000	-.0038	-.0016	.0003	-.0001	.0163	.0000	.0000	.0005	.0001
#2	-.0001	.0119	-.0013	.0003	-.0001	.0179	.0000	-.0002	.0007	.0005
#3	-.0004	.0020	-.0016	.0003	-.0001	.0195	.0000	-.0002	.0007	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0240	-.1039	.0026	.0002	-.0005	-.2818	.0002	.0006	-.0010	-.0013
Stddev	.0017	.0091	.0029	.0000	.0001	.0048	.0001	.0005	.0008	.0012
%RSD	6.894	8.741	114.0	4.427	17.11	1.718	32.07	80.68	77.90	96.58
#1	.0253	-.0956	.0017	.0002	-.0004	-.2763	.0002	.0011	-.0015	-.0012
#2	.0246	-.1136	.0002	.0002	-.0005	-.2854	.0001	.0006	-.0014	-.0001
#3	.0222	-.1025	.0058	.0002	-.0006	-.2837	.0002	.0001	-.0001	-.0026
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0213	-.0001	.0002	-.0012	-.0001	.0047
Stddev	.0004	.0001	.0001	.0001	.0001	.0002	.0000
%RSD	146.9	.6782	89.75	30.67	8.296	162.1	.3238
#1	-.0008	.0215	.0000	.0002	-.0012	-.0001	.0047
#2	.0000	.0214	-.0001	.0002	-.0011	.0001	.0047
#3	-.0001	.0212	-.0002	.0001	-.0012	-.0002	.0047
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP30386-MB1 Acquired: 5/23/2016 19:21:17 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2729.1	6196.5	51271.	4469.3
Stddev	2.4	3.4	261.	46.7
%RSD	.08876	.05508	.50832	1.0454
#1	2731.9	6198.7	51061.	4440.7
#2	2728.2	6198.3	51189.	4523.3
#3	2727.3	6192.6	51563.	4444.1

SGS ACCUTEST FA33973

Zoom In Zoom Out

Sample Name: MP30386-B1 Acquired: 5/23/2016 19:25:29 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0460	26.51	1.939	2.055	.0507	25.15	.0500	.4994	.2016	.2555
Stddev	.0004	.04	.002	.001	.0002	.04	.0000	.0004	.0003	.0012
%RSD	.8460	.1332	.0912	.0676	.3436	.1450	.0588	.0790	.1299	.4532
#1	.0462	26.48	1.941	2.054	.0508	25.11	.0500	.4999	.2017	.2544
#2	.0456	26.51	1.938	2.056	.0505	25.16	.0500	.4992	.2013	.2554
#3	.0463	26.55	1.937	2.056	.0507	25.18	.0500	.4992	.2018	.2567
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.17	25.10	24.45	.5105	.4792	25.75	.5048	.4787	.4854	1.961
Stddev	.11	.04	.04	.0004	.0008	.04	.0003	.0003	.0017	.004
%RSD	.4172	.1532	.1796	.0687	.1763	.1698	.0501	.0691	.3524	.2306
#1	25.07	25.06	24.48	.5104	.4801	25.70	.5050	.4788	.4836	1.965
#2	25.16	25.09	24.40	.5102	.4790	25.79	.5049	.4784	.4871	1.963
#3	25.28	25.14	24.48	.5109	.4785	25.75	.5045	.4790	.4855	1.956
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0061	.5137	.4842	.4893	1.942	.4684	.4975
Stddev	.0009	.0010	.0003	.0008	.003	.0013	.0005
%RSD	14.67	.1898	.0682	.1623	.1770	.2728	.0973
#1	.0071	.5144	.4839	.4891	1.946	.4670	.4978
#2	.0053	.5141	.4843	.4887	1.939	.4694	.4969
#3	.0058	.5126	.4845	.4902	1.942	.4689	.4978
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP30386-B1 Acquired: 5/23/2016 19:25:29 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2451.9	6049.8	49206.	4368.6
Stddev	2.1	7.2	96.	18.8
%RSD	.08460	.11978	.19533	.42976
#1	2450.7	6043.6	49179.	4387.6
#2	2454.3	6057.8	49126.	4368.1
#3	2450.7	6047.9	49313.	4350.0

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/23/2016 19:29:27 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2541	40.44	2.006	2.026	2.008	40.30	2.046	2.038	2.053	2.031
Stddev	.0008	.06	.003	.001	.001	.04	.001	.001	.003	.003
%RSD	.3248	.1418	.1294	.0378	.0586	.0878	.0705	.0585	.1513	.1518
#1	.2538	40.40	2.003	2.027	2.008	40.30	2.047	2.037	2.050	2.032
#2	.2534	40.42	2.009	2.025	2.009	40.26	2.044	2.037	2.053	2.027
#3	.2550	40.51	2.007	2.026	2.006	40.33	2.046	2.039	2.056	2.033
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.61	41.13	40.36	2.059	2.054	42.49	2.036	2.013	2.006	2.011
Stddev	.10	.07	.18	.002	.006	.13	.001	.005	.005	.002
%RSD	.2467	.1754	.4575	.1141	.2876	.3118	.0604	.2309	.2761	.1051
#1	41.69	41.20	40.57	2.057	2.048	42.59	2.035	2.009	1.999	2.009
#2	41.65	41.11	40.31	2.061	2.055	42.53	2.035	2.012	2.009	2.012
#3	41.49	41.06	40.21	2.060	2.060	42.34	2.037	2.018	2.009	2.012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.242	2.070	2.089	2.101	2.028	2.067	2.043
Stddev	.004	.002	.002	.003	.001	.002	.002
%RSD	.1968	.1158	.1075	.1298	.0299	.1063	.1168
#1	2.237	2.068	2.090	2.098	2.029	2.069	2.044
#2	2.245	2.071	2.090	2.103	2.028	2.065	2.040
#3	2.243	2.073	2.086	2.102	2.028	2.068	2.044
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/23/2016 19:29:27 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2240.5	5751.0	46639.	4212.1
Stddev	7.9	16.2	123.	34.9
%RSD	.35365	.28212	.26470	.82946
#1	2242.7	5753.2	46760.	4178.4
#2	2247.1	5766.0	46513.	4209.8
#3	2231.7	5733.8	46645.	4248.1

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/23/2016 19:33:25 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	-.0095	.0002	.0001	.0000	-.0056	.0001	.0001	.0000
Stddev	.000	.0052	.0004	.0001	.000	.0053	.0001	.0001	.000
%RSD	1128.	54.49	174.6	221.3	48.06	94.79	64.30	103.6	722.7
#1	-.0001	-.0046	.0003	.0002	.0000	-.0113	.0002	.0001	.0002
#2	-.0004	-.0148	-.0002	.0000	.0000	-.0047	.0001	.0001	-.0003
#3	.0003	-.0090	.0006	-.0001	.0000	-.0008	.0001	.0000	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005	.0212	-.1264	.0060	.0001	F.0020	-.2812	.0001	-.0003
Stddev	.0001	.0084	.0237	.0071	.0000	.0006	.0086	.0001	.0002
%RSD	12.93	39.66	18.78	117.3	31.93	31.57	3.062	78.89	44.12
#1	.0004	.0299	-.1419	-.0021	.0002	.0026	-.2910	.0000	-.0002
#2	.0006	.0205	-.1383	.0104	.0001	.0021	-.2777	.0001	-.0005
#3	.0006	.0131	-.0991	.0098	.0001	.0013	-.2749	.0002	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0016	-.0018	-.0068	.0002	.0000	.0011	.0001	.0000	.0001
Stddev	.0006	.0013	.0004	.0001	.0000	.0001	.0001	.0002	.0000
%RSD	35.41	72.77	5.970	41.41	193.0	10.71	191.1	14190.	56.59
#1	.0022	-.0028	-.0064	.0003	.0000	.0011	.0000	.0001	.0001
#2	.0013	-.0003	-.0070	.0001	.0000	.0012	.0000	.0001	.0001
#3	.0013	-.0024	-.0071	.0003	.0000	.0010	.0002	-.0002	.0000
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/23/2016 19:33:25 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2645.1	6018.9	49601.	4232.7
Stddev	4.4	6.0	203.	25.7
%RSD	.16731	.09895	.40841	.60640
#1	2640.1	6012.4	49498.	4205.8
#2	2646.6	6024.2	49471.	4235.5
#3	2648.6	6020.0	49835.	4256.9

Zoom In Zoom Out

Sample Name: MP30386-B2 Acquired: 5/23/2016 19:37:38 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0474	26.49	1.969	2.083	.0510	25.08	.0505	.5038	.2015	.2562
Stddev	.0003	.14	.001	.010	.0003	.13	.0001	.0003	.0009	.0002
%RSD	.5528	.5181	.0244	.4984	.5841	.5353	.1365	.0621	.4336	.0692
#1	.0474	26.34	1.968	2.071	.0506	24.93	.0506	.5039	.2010	.2564
#2	.0471	26.61	1.969	2.092	.0512	25.20	.0504	.5035	.2025	.2562
#3	.0477	26.51	1.968	2.086	.0511	25.10	.0505	.5041	.2010	.2560
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.42	25.24	24.38	.5144	.4854	25.72	.5095	.4846	.4939	1.996
Stddev	.13	.14	.14	.0010	.0003	.12	.0006	.0011	.0030	.002
%RSD	.5241	.5465	.5691	.1911	.0585	.4610	.1233	.2228	.6162	.0990
#1	25.27	25.09	24.25	.5136	.4854	25.58	.5101	.4856	.4907	1.994
#2	25.51	25.35	24.53	.5155	.4851	25.82	.5089	.4848	.4943	1.997
#3	25.49	25.30	24.36	.5141	.4856	25.75	.5094	.4835	.4967	1.997
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0047	.5190	.4886	.4959	1.963	.4683	.5052
Stddev	.0001	.0004	.0027	.0010	.003	.0002	.0004
%RSD	2.279	.0754	.5557	.2092	.1399	.0509	.0829
#1	.0047	.5194	.4855	.4954	1.962	.4686	.5055
#2	.0047	.5188	.4901	.4971	1.965	.4682	.5047
#3	.0045	.5187	.4903	.4952	1.960	.4682	.5054
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP30386-B2 Acquired: 5/23/2016 19:37:38 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2435.6	6021.8	49179.	4390.8
Stddev	4.2	11.8	114.	32.4
%RSD	.17418	.19608	.23218	.73849
#1	2430.9	6008.2	49127.	4403.6
#2	2436.5	6029.2	49099.	4353.9
#3	2439.2	6028.0	49310.	4414.8

Zoom In Zoom Out

Sample Name: FA33945-1 Acquired: 5/23/2016 19:41:37 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.0698	.0118	.0002	.0000	.0478	.0000	.0003	.0052	.0021
Stddev	.0003	.0046	.0003	.0001	.000	.0036	.000	.0000	.0001	.0000
%RSD	1256.	6.574	2.947	40.07	1678.	7.574	159.7	13.43	2.496	2.383
#1	-.0003	.0648	.0116	.0004	.0000	.0448	.0000	.0003	.0053	.0020
#2	.0002	.0738	.0116	.0002	-.0001	.0518	.0000	.0004	.0051	.0021
#3	.0002	.0708	.0122	.0002	.0001	.0469	.0000	.0003	.0052	.0021

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.2465	-.0584	.0105	.0010	.0005	-.2388	.0028	.0012	.0017	.0049
Stddev	.0039	.0045	.0107	.0000	.0001	.0081	.0002	.0003	.0014	.0003
%RSD	1.589	7.690	101.9	1.707	10.34	3.380	6.434	25.35	84.89	5.519
#1	.2506	-.0613	-.0002	.0010	.0004	-.2344	.0026	.0012	.0026	.0052
#2	.2428	-.0533	.0105	.0010	.0005	-.2481	.0029	.0009	.0000	.0048
#3	.2462	-.0608	.0212	.0010	.0005	-.2339	.0030	.0016	.0024	.0047

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0061	.0228	.0000	.0270	-.0006	.0247	.0038
Stddev	.0004	.0001	.0000	.0000	.0002	.0000	.0000
%RSD	6.135	.5742	95.81	.1641	39.54	.0714	.8181
#1	.0065	.0228	.0000	.0271	-.0009	.0248	.0038
#2	.0058	.0228	.0000	.0270	-.0005	.0247	.0038
#3	.0059	.0226	.0001	.0270	-.0005	.0247	.0038

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2771.7	6210.7	51453.	4456.0
Stddev	3.2	5.3	175.	36.0
%RSD	.11507	.08491	.33970	.80861
#1	2774.8	6207.7	51388.	4428.2
#2	2771.9	6216.8	51651.	4496.7
#3	2768.4	6207.6	51320.	4443.0

Zoom In Zoom Out

Sample Name: CRIA Acquired: 5/23/2016 19:45:49 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0089	.2179	.0108	.2142	.0051	1.068	.0055	.0553	.0111	.0282
Stddev	.0002	.0081	.0009	.0005	.0000	.001	.0000	.0001	.0002	.0004
%RSD	2.214	3.719	7.895	.2195	.8801	.1088	.3892	.1618	1.749	1.579
#1	.0087	.2207	.0117	.2139	.0052	1.069	.0055	.0554	.0111	.0287
#2	.0089	.2087	.0108	.2139	.0051	1.067	.0054	.0552	.0113	.0280
#3	.0091	.2242	.0100	.2147	.0051	1.068	.0055	.0552	.0110	.0279

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.3129	10.70	5.364	.0165	.0497	10.92	.0442	.0049	.0048	.0090
Stddev	.0031	.02	.051	.0000	.0002	.02	.0001	.0002	.0004	.0007
%RSD	.9831	.1926	.9496	.2381	.4531	.1458	.2639	3.651	8.355	8.117
#1	.3094	10.71	5.402	.0166	.0499	10.90	.0441	.0047	.0052	.0083
#2	.3138	10.72	5.306	.0165	.0495	10.92	.0441	.0051	.0044	.0090
#3	.3154	10.68	5.383	.0165	.0497	10.93	.0443	.0048	.0049	.0098

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0965	.0536	.0103	.0103	.0105	.0495	.0221
Stddev	.0004	.0003	.0001	.0000	.0005	.0002	.0001
%RSD	.4038	.5286	.8369	.1229	5.166	.4365	.2307
#1	.0969	.0539	.0103	.0102	.0105	.0496	.0221
#2	.0965	.0533	.0102	.0103	.0111	.0497	.0222
#3	.0961	.0535	.0104	.0103	.0100	.0492	.0221

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2557.4	6022.2	48996.	4325.9
Stddev	6.1	3.7	222.	42.4
%RSD	.23973	.06102	.45272	.97944
#1	2562.7	6020.6	49091.	4373.5
#2	2550.7	6026.5	48742.	4292.2
#3	2558.7	6019.7	49154.	4312.2

Zoom In Zoom Out

Sample Name: ICSA Acquired: 5/23/2016 19:49:55 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0003	F514.6	-.0003	.0005	.0000	482.9	-.0001	-.0003	.0001
Stddev	.0006	5.3	.0014	.0002	.0001	4.8	.0001	.0001	.0003
%RSD	170.2	1.033	500.5	35.31	279.5	.9963	88.48	22.87	394.2
#1	.0001	513.2	.0013	.0004	.0000	479.3	-.0001	-.0004	.0004
#2	-.0010	510.2	-.0014	.0005	-.0001	480.9	.0000	-.0003	.0000
#3	-.0001	520.5	-.0007	.0007	.0001	488.3	-.0001	-.0003	-.0001

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0005	180.5	-.0434	F511.2	-.0003	-.0002	-.0938	-.0005	-.0022
Stddev	.0001	.5	.0215	1.3	.0000	.0003	.0165	.0002	.0015
%RSD	12.56	.2850	49.55	.2577	5.444	142.2	17.56	38.51	69.32
#1	.0005	180.3	-.0240	511.2	-.0003	-.0004	-.1085	-.0003	-.0018
#2	.0005	180.0	-.0397	509.9	-.0003	-.0003	-.0968	-.0006	-.0009
#3	.0006	181.0	-.0665	512.5	-.0003	.0001	-.0760	-.0006	-.0039

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0002	-.0015	.0062	.0001	.0001	.0001	-.0002	.0005	-.0008
Stddev	.0022	.0015	.0006	.0004	.0001	.0001	.0018	.0001	.0001
%RSD	1132.	99.16	9.383	475.1	167.8	193.8	847.2	27.11	15.18
#1	-.0013	-.0002	.0060	.0006	.0001	.0002	.0016	.0005	-.0007
#2	.0023	-.0011	.0058	-.0002	.0001	.0000	-.0021	.0003	-.0007
#3	-.0016	-.0032	.0069	-.0001	-.0001	.0000	-.0002	.0006	-.0009

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2023.5	5350.3	42080.	4105.7
Stddev	5.5	3.8	165.	23.7
%RSD	.27250	.07033	.39110	.57677
#1	2017.3	5347.7	42263.	4108.7
#2	2027.8	5354.6	41945.	4127.7
#3	2025.3	5348.6	42031.	4080.6

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 5/23/2016 19:54:13 Type: Unk
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	F1.021	F503.9	1.120	.5427	.5125	482.3	1.001	.4988	.5347
Stddev	.003	4.9	.003	.0026	.0020	7.6	.003	.0014	.0011
%RSD	.3114	.9780	.3028	.4842	.3957	1.571	.2613	.2724	.2030
#1	1.023	500.6	1.122	.5401	.5102	474.3	.9991	.4976	.5359
#2	1.017	501.5	1.116	.5427	.5139	489.3	1.000	.4984	.5340
#3	1.023	509.5	1.122	.5453	.5134	483.4	1.004	.5003	.5341

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.5582	183.1	-.0473	F510.0	.5298	.9451	-.0928	1.001	1.002
Stddev	.0021	1.1	.0182	2.8	.0003	.0022	.0204	.002	.003
%RSD	.3771	.6087	38.36	.5568	.0474	.2343	21.93	.1978	.3312
#1	.5587	182.0	-.0431	506.7	.5301	.9437	-.0881	1.000	.9977
#2	.5559	182.9	-.0317	511.4	.5296	.9439	-.0752	1.0000	1.003
#3	.5600	184.2	-.0672	511.9	.5298	.9476	-.1151	1.004	1.004

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.043	1.052	.0581	.9383	1.017	1.024	.9894	.4837	1.001
Stddev	.001	.002	.0004	.0032	.002	.000	.0039	.0008	.003
%RSD	.0936	.1827	.6299	.3445	.2102	.0360	.3992	.1656	.3442
#1	1.041	1.050	.0585	.9370	1.015	1.024	.9849	.4846	.9980
#2	1.043	1.053	.0577	.9359	1.018	1.024	.9914	.4832	.9991
#3	1.043	1.053	.0580	.9419	1.019	1.024	.9920	.4833	1.004

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1993.1	5331.5	42101.	4117.7
Stddev	4.5	11.1	147.	39.4
%RSD	.22715	.20875	.34912	.95763
#1	1998.1	5340.6	42088.	4162.0
#2	1992.0	5334.8	41962.	4104.7
#3	1989.2	5319.1	42255.	4086.5

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Zoom In Zoom Out

Sample Name: CCV Acquired: 5/23/2016 19:58:29 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2524	40.31	2.020	2.032	1.986	40.24	2.042	2.032	2.006	2.003
Stddev	.0006	.09	.005	.008	.006	.15	.002	.002	.004	.005
%RSD	.2340	.2115	.2415	.3952	.2908	.3650	.0951	.1131	.1776	.2734
#1	.2519	40.38	2.025	2.036	1.992	40.38	2.040	2.030	2.003	1.999
#2	.2531	40.21	2.015	2.023	1.980	40.09	2.043	2.032	2.006	2.009
#3	.2524	40.34	2.020	2.037	1.985	40.24	2.043	2.035	2.010	2.001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.59	41.05	39.98	2.037	2.051	42.07	2.037	2.000	2.021	2.037
Stddev	.13	.18	.12	.002	.006	.11	.002	.005	.003	.006
%RSD	.3017	.4491	.3001	.0949	.3134	.2561	.1073	.2366	.1631	.2896
#1	41.60	41.20	40.10	2.037	2.045	42.19	2.035	1.995	2.023	2.040
#2	41.47	40.84	39.86	2.035	2.051	41.99	2.037	2.000	2.017	2.030
#3	41.72	41.09	39.98	2.039	2.058	42.02	2.039	2.004	2.022	2.041
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.251	2.081	2.076	2.077	2.012	2.046	2.040
Stddev	.003	.004	.006	.003	.005	.003	.003
%RSD	.1135	.2137	.3007	.1466	.2519	.1390	.1286
#1	2.250	2.080	2.082	2.076	2.007	2.043	2.037
#2	2.249	2.078	2.070	2.074	2.017	2.049	2.041
#3	2.254	2.086	2.075	2.080	2.013	2.045	2.041
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 5/23/2016 19:58:29 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2252.7	5746.6	47158.	4237.8
Stddev	6.5	12.2	132.	2.0
%RSD	.28908	.21241	.27935	.04715
#1	2260.0	5760.7	47166.	4235.6
#2	2247.6	5739.3	47023.	4238.3
#3	2250.4	5739.9	47286.	4239.5

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/23/2016 20:02:27 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0034	-.0002	.0004	.0004	.0134	.0002	.0001	.0005
Stddev	.0002	.0102	.0005	.0001	.0001	.0075	.0001	.0001	.0002
%RSD	184.0	298.5	238.7	39.25	34.60	55.97	67.67	75.00	41.63
#1	-.0004	.0024	.0003	.0003	.0002	.0048	.0003	.0002	.0003
#2	.0000	.0142	-.0001	.0003	.0004	.0168	.0001	.0000	.0005
#3	.0000	-.0062	-.0007	.0005	.0005	.0186	.0001	.0001	.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0009	.0399	-.1103	.0227	.0004	F.0020	-.2637	.0002	-.0010
Stddev	.0003	.0056	.0125	.0147	.0000	.0007	.0085	.0002	.0004
%RSD	28.67	13.94	11.29	64.66	11.58	34.65	3.221	147.4	37.63
#1	.0010	.0463	-.0961	.0095	.0004	.0027	-.2685	.0004	-.0006
#2	.0012	.0360	-.1151	.0201	.0004	.0018	-.2539	.0002	-.0012
#3	.0006	.0374	-.1196	.0385	.0003	.0014	-.2687	-.0001	-.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	-.0005	-.0070	.0001	.0004	.0013	-.0004	.0004	.0001
Stddev	.0006	.0002	.0003	.0002	.0001	.0002	.0001	.0001	.0001
%RSD	100.6	38.89	4.431	139.0	22.23	12.18	30.33	12.79	85.78
#1	.0013	-.0006	-.0067	.0003	.0003	.0015	-.0004	.0004	.0002
#2	.0004	-.0007	-.0070	.0002	.0003	.0013	-.0006	.0005	.0002
#3	.0002	-.0003	-.0073	-.0001	.0004	.0012	-.0003	.0004	.0000
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 5/23/2016 20:02:27 Type: QC
Method: 60102007_041712(v135) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2622.7	5981.4	49397.	4278.3
Stddev	3.4	1.2	176.	32.5
%RSD	.13136	.02084	.35727	.76060
#1	2625.5	5982.3	49497.	4264.7
#2	2618.9	5980.0	49501.	4254.7
#3	2623.8	5982.0	49193.	4315.4

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Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Ag 328.068 {103}	X	3	V	-0.009834	0.000000	No
			Fe	-0.000001	0.000000	No
			Mg	0.000002	0.000000	No
Al 396.152 { 85}	X	1	Mo	0.035224	0.000000	No
As 189.042 {478}	X	5	Fe	-0.000086	0.000000	No
			Cr	-0.000226	0.000000	No
			Mo	-0.000017	0.000000	No
			Al	0.000004	0.000000	No
			Ca	0.000002	0.000000	No
Ba 455.403 { 74}	X	1	Fe	0.000004	0.000000	No
Be 313.042 {108}	X	2	V	0.000115	0.000000	No
			Ti	-0.000059	0.000000	No
Ca 317.933 {106}	X	None				
Cd 226.502 {449}	X	4	Fe	0.000098	0.000000	No
			Ca	0.000001	0.000000	No
			Al	-0.000001	0.000000	No
			Ti	0.000151	0.000000	No
Co 228.616 {447}	X	3	Mo	-0.001220	0.000000	No
			Ti	0.003012	0.000000	No
			Fe	-0.000001	0.000000	No
Cr 267.716 {126}	X	3	Al	0.000005	0.000000	No
			Fe	-0.000012	0.000000	No
			Ca	0.000002	0.000000	No
Cu 324.754 {104}	X	10	Fe	-0.000144	0.000000	No
			Ca	0.000002	0.000000	No
			Mo	0.000528	0.000000	No
			Sn	-0.000012	0.000000	No
			V	-0.000158	0.000000	No
			Ti	-0.000251	0.000000	No
			Al	0.000004	0.000000	No
			Mg	0.000002	0.000000	No
			Co	-0.000787	0.000000	No
			Cd	0.000240	0.000000	No
Fe 259.940 {130}	X	None				
In 230.606 {446}*	X	None				
K 766.490 { 44}	X	None				
Mg 279.079 {121}	X	None				
Mn 257.610 {131}	X	2	Fe	-0.000005	0.000000	No
			Mg	0.000001	0.000000	No
Mo 202.030 {467}	X	1	Fe	-0.000017	0.000000	No
Na 589.592 { 57}	X	None				
Ni 231.604 {445}	X	7	Fe	-0.000053	0.000000	No
			Co	-0.000054	0.000000	No
			Mo	0.000005	0.000000	No
			Sb	-0.000120	0.000000	No
			Al	0.000003	0.000000	No
			Be	-0.000269	0.000000	No
			Tl	0.000440	0.000000	No
Pb 220.353 {453}	X	9	Al	0.000294	0.000000	No
			Fe	-0.000053	0.000000	No
			Mo	-0.001012	0.000000	No
			Cu	0.001070	0.000000	No
			Ti	0.000036	0.000000	No
			Si	0.000071	0.000000	No
			Ca	-0.000001	0.000000	No
			Cr	0.000050	0.000000	No
			Mg	0.000004	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Sb 206.833 {463}	☒	10	Fe	0.000009	0.000000	No
			Cr	0.012140	0.000000	No
			Mo	-0.004076	0.000000	No
			V	-0.000611	0.000000	No
			Sn	-0.010736	0.000000	No
			Ti	0.000040	0.000000	No
			Ca	-0.000001	0.000000	No
			Ni	-0.000438	0.000000	No
			Mg	-0.000002	0.000000	No
			Al	0.000003	0.000000	No
Se 196.090 {472}	☒	10	Fe	0.000010	0.000000	No
			Ca	-0.000001	0.000000	No
			Mn	0.000574	0.000000	No
			Mo	0.000111	0.000000	No
			Al	-0.000015	0.000000	No
			V	0.000000	0.000000	No
			Zn	0.000000	0.000000	No
			Sr	0.000137	0.000000	No
			As	-0.000032	0.000000	No
			Be	0.000212	0.000000	No
Si 212.412 {459}	☒	1	Mo	0.019120	0.000000	No
Sn 189.989 {477}	☒	None				
Sr 407.771 { 83}	☒	1	Ca	0.000017	0.000000	No
Ti 334.941 {101}	☒	1	Ca	-0.000007	0.000000	No
Tl 190.856 {477}	☒	11	Co	0.001145	0.000000	No
			Fe	0.000009	0.000000	No
			Al	-0.000011	0.000000	No
			Ba	-0.000051	0.000000	No
			Ti	-0.002651	0.000000	No
			Sb	0.000012	0.000000	No
			Ca	0.000003	0.000000	No
			Cr	0.000230	0.000000	No
			Mg	-0.000003	0.000000	No
			Mn	0.000818	0.000000	No
			V	-0.038621	0.000000	No
V 292.402 {115}	☒	5	Fe	0.000008	0.000000	No
			Cr	-0.002590	0.000000	No
			Mo	-0.005797	0.000000	No
			Ti	0.000364	0.000000	No
			Mn	-0.000693	0.000000	No
Y 224.306 {450}*	☒	None				
Y 360.073 { 94}*	☒	None				
Y 371.030 { 91}*	☒	None				
Zn 206.200 {463}	☒	5	Cr	-0.000965	0.000000	No
			Al	0.000005	0.000000	No
			Ca	0.000003	0.000000	No
			Fe	0.000006	0.000000	No
			As	0.001128	0.000000	No

	Element, Wavelength and Order	Date of Fit	Date of Cal.	Type of Fit	Weighting	A0	A1	A2	n (Exponent)
	Ag 328.068 {103}	5/23/2016 9:36:36	5/23/2016 9:06:14	Linear	1/Conc	-0.001107	0.621367	0.000000	1.000000
	Al 396.152 { 85}	5/23/2016 9:36:36	5/23/2016 9:06:14	Linear	1/Conc	-0.012187	0.192307	0.000000	1.000000
	As 189.042 {478}	5/23/2016 9:36:36	5/23/2016 9:06:14	Linear	1/Conc	-0.000312	0.259991	0.000000	1.000000
	Ba 455.403 { 74}	5/23/2016 9:36:36	5/23/2016 9:06:14	Linear	1/Conc	0.014292	15.532870	0.000000	1.000000
	Be 313.042 {108}	5/23/2016 9:36:36	5/23/2016 9:06:14	Linear	1/Conc	-0.000191	8.916514	0.000000	1.000000
	Ca 317.933 {106}	5/23/2016 9:36:36	5/23/2016 9:06:14	Linear	1/Conc	0.004214	0.287735	0.000000	1.000000
	Cd 226.502 {449}	5/23/2016 9:36:36	5/23/2016 9:06:14	Linear	1/Conc	-0.000299	5.617091	0.000000	1.000000
	Co 228.616 {447}	5/23/2016 9:36:36	5/23/2016 9:06:14	Linear	1/Conc	0.000277	2.689684	0.000000	1.000000
	Cr 267.716 {126}	5/23/2016 9:36:36	5/23/2016 9:06:14	Linear	1/Conc	0.000086	0.427573	0.000000	1.000000
	Cu 324.754 {104}	5/23/2016 9:36:36	5/23/2016 9:06:14	Linear	1/Conc	0.004807	0.712603	0.000000	1.000000
	Fe 259.940 {130}	5/23/2016 9:36:36	5/23/2016 9:06:14	Linear	1/Conc	0.001465	0.171844	0.000000	1.000000
	In 230.606 {446}*	5/23/2016 9:36:36	5/5/2010 12:30:54	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	K 766.490 { 44}	5/23/2016 9:36:36	5/23/2016 9:06:14	Linear	1/Conc	-0.010250	0.164528	0.000000	1.000000
	Mg 279.079 {121}	5/23/2016 9:36:36	5/23/2016 9:06:14	Linear	1/Conc	-0.000361	0.027004	0.000000	1.000000
	Mn 257.610 {131}	5/23/2016 9:36:36	5/23/2016 9:06:14	Linear	1/Conc	0.000267	2.993211	0.000000	1.000000
	Mo 202.030 {467}	5/23/2016 9:36:36	5/23/2016 9:06:14	Linear	1/Conc	0.000650	1.488757	0.000000	1.000000
	Na 589.592 { 57}	5/23/2016 9:36:36	5/23/2016 9:06:14	Linear	1/Conc	-0.005269	0.458816	0.000000	1.000000
	Ni 231.604 {445}	5/23/2016 9:36:36	5/23/2016 9:06:14	Linear	1/Conc	0.000480	1.778283	0.000000	1.000000
	Pb 220.353 {453}	5/23/2016 9:36:36	5/23/2016 9:06:14	Linear	1/Conc	-0.001143	1.330447	0.000000	1.000000
	Sb 206.833 {463}	5/23/2016 9:36:36	5/23/2016 9:06:14	Linear	1/Conc	0.000603	0.285517	0.000000	1.000000
	Se 196.090 {472}	5/23/2016 9:36:36	5/23/2016 9:06:14	Linear	1/Conc	0.000188	0.181443	0.000000	1.000000
	Si 212.412 {459}	5/23/2016 9:36:36	5/23/2016 9:06:14	Linear	1/Conc	0.005995	0.462390	0.000000	1.000000
	Sn 189.989 {477}	5/23/2016 9:36:36	5/23/2016 9:06:14	Linear	1/Conc	0.000157	0.598332	0.000000	1.000000
	Sr 407.771 { 83}	5/23/2016 9:36:36	5/23/2016 9:06:14	Linear	1/Conc	0.003852	20.051584	0.000000	1.000000
	Ti 334.941 {101}	5/23/2016 9:36:36	5/23/2016 9:06:14	Linear	1/Conc	0.000869	1.959839	0.000000	1.000000
	Tl 190.856 {477}	5/23/2016 9:36:36	5/23/2016 9:06:14	Linear	1/Conc	-0.003774	0.628332	0.000000	1.000000
	V 292.402 {115}	5/23/2016 9:36:36	5/23/2016 9:06:14	Linear	1/Conc	-0.000252	0.703257	0.000000	1.000000
	Y 224.306 {450}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	Y 360.073 { 94}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	Y 371.030 { 91}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	Zn 206.200 {463}	5/23/2016 9:36:36	5/23/2016 9:06:14	Linear	1/Conc	0.001805	3.544749	0.000000	1.000000

	Element, Wavelength and Order	Correlation	Std Error of Est	Predicted MDL	Predicted MQL	Status	Reslope		QC Norm	
							Slope	Y-int	Slope factor	Offset
	Ag 328.068 {103}	0.999999	0.000009	0.000397	0.001322	OK.	1.000000	0.000000	1	0
	Al 396.152 { 85}	0.999822	0.005850	0.010218	0.034058	OK.	1.000000	0.000000	1	0
	As 189.042 {478}	0.999856	0.000355	0.000650	0.002166	OK.	1.000000	0.000000	1	0
	Ba 455.403 { 74}	0.999945	0.013129	0.000181	0.000602	OK.	1.000000	0.000000	1	0
	Be 313.042 {108}	0.999956	0.006726	0.000083	0.000277	OK.	1.000000	0.000000	1	0
	Ca 317.933 {106}	0.999854	0.007910	0.003147	0.010490	OK.	1.000000	0.000000	1	0
	Cd 226.502 {449}	0.999948	0.004620	0.000046	0.000152	OK.	1.000000	0.000000	1	0
	Co 228.616 {447}	0.999973	0.001599	0.000103	0.000342	OK.	1.000000	0.000000	1	0
	Cr 267.716 {126}	0.999932	0.000402	0.000323	0.001076	OK.	1.000000	0.000000	1	0
	Cu 324.754 {104}	0.999967	0.000462	0.000288	0.000960	OK.	1.000000	0.000000	1	0
	Fe 259.940 {130}	0.999609	0.007740	0.002616	0.008721	OK.	1.000000	0.000000	1	0
	In 230.606 {446}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	K 766.490 { 44}	0.999839	0.004759	0.024459	0.081531	OK.	1.000000	0.000000	1	0
	Mg 279.079 {121}	0.999890	0.000644	0.020446	0.068154	OK.	1.000000	0.000000	1	0
	Mn 257.610 {131}	0.999860	0.004028	0.000043	0.000143	OK.	1.000000	0.000000	1	0
	Mo 202.030 {467}	0.999970	0.000930	0.000119	0.000395	OK.	1.000000	0.000000	1	0
	Na 589.592 { 57}	0.999826	0.013786	0.008597	0.028657	OK.	1.000000	0.000000	1	0
	Ni 231.604 {445}	0.999963	0.001236	0.000155	0.000518	OK.	1.000000	0.000000	1	0
	Pb 220.353 {453}	0.999794	0.002188	0.000479	0.001597	OK.	1.000000	0.000000	1	0
	Sb 206.833 {463}	0.999894	0.000334	0.000948	0.003160	OK.	1.000000	0.000000	1	0
	Se 196.090 {472}	0.999911	0.000196	0.001416	0.004720	OK.	1.000000	0.000000	1	0
	Si 212.412 {459}	0.999564	0.001121	0.000416	0.001387	OK.	1.000000	0.000000	1	0
	Sn 189.989 {477}	0.999876	0.000760	0.000236	0.000786	OK.	1.000000	0.000000	1	0
	Sr 407.771 { 83}	0.999964	0.013716	0.000083	0.000275	OK.	1.000000	0.000000	1	0
	Ti 334.941 {101}	0.999888	0.002357	0.000114	0.000381	OK.	1.000000	0.000000	1	0
	Tl 190.856 {477}	0.999943	0.000520	0.000645	0.002150	OK.	1.000000	0.000000	1	0
	V 292.402 {115}	0.999939	0.000622	0.000255	0.000851	OK.	1.000000	0.000000	1	0
	Y 224.306 {450}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Y 360.073 { 94}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Y 371.030 { 91}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Zn 206.200 {463}	0.999938	0.003179	0.000053	0.000177	OK.	1.000000	0.000000	1	0

DOD + (MS)

Accutest Laboratories SE Metals Digestion Log Soil

MP #: 303104

Method of Digestion: SW846-3050B

Prep Date/Time (mm/dd/yy 24:00): 5/17/16 10:34 *8:44

HotBlock I.D. 4

Thermometer I.D. 6071

Correction Factor (°C) -1

Temperature Observed/Corrected (°C) 92/91

Balance I.D. ADVPR03

Spk. Sol. A	Volume Used(ml)	Pipette #
ACC 938	0.50	10
ACC 924	0.25	10
MET 5377	0.25	10

Filter Lot#: 150928009

Dig. Tube Lot# J220204-261

Added B:

	H_2O_2	HNO_3	HCL	PTFE Boiling Chips
Lot#	157487	1115100	4115100	R263-5K012

Sample #	Wt., g	Final Volume(ml)	Comments
Method Blank(MB)	1.00	50.0	
Spike Blank(SB)	1.00		
Matrix Spike(MS)	1.23		
Matrix Spike Dup(MSD)	1.19		
Duplicate(DUP)	1.15		
1 QC C FA33973-1 D 1	1.26		
2 ↓ 2 1	1.21		
3 FA33987-1 4	1.11		
4 FA33931-5 1	1.06		Turned green w/ first addition of HNO3. DB 5/17/16
5 6	1.26		
6 7	1.06		
7 8	1.28		
8 9	1.09		
9 10	1.14		
10 11	1.18		
11 12	1.29		
12 13	1.15		
13 14	1.12		
14 15	1.01		
15 16	1.07		
16 17	1.11		
17 18	1.10		
18 19	1.21		
19 20	1.25		
20 ↓ 21 ↓	1.11	↓	
21 E			
22 E			5/17/16
23 E			
24 E			

Analyst: [redacted] Date: 5/17/16

QC Review: [redacted] Date: 5.17.16

A Used for SB, MS, MSD
B For reagent volumes used consult SOP MET 104, current revision
C Parent sample used to prepare MS, MSD, DUP
D Bottle Number
E Additional Matrix QC

icpsoildigestionlog012010.xls Rev 01/20/10 DM

* DB 5/17/16

SGS ACCUTEST FA33973

DOD (ms)

Accutest Laboratories SE **Metals Digestion Log Soil**

MP #: 30374 **Method of Digestion:** SW846-3050B

Prep Date/Time (mm/dd/yy 24:00): 5/19/16 9:26
HotBlock I.D. 6
Thermometer I.D. 6071
Correction Factor (°C) -1
Temperature Observed/Corrected (°C) 93/92
Balance I.D. ADVP103

Spk. Sol. [A]	Volume Used(ml)	Pipette #
ACC 938	0.50	10
ACC 924	0.25	10
Met 5377	0.22	10

Filter Lot#: 160217041
Dig. Tube Lot# J235515-6560

Added [B]:	H_2O_2	HNO_3	HCL	PTFE Boiling Chips
Lot#	157487	1115120	4115100	5071-6A030

Sample #		D	Wt., g	Final Volume(ml)	Comments
Method Blank(MB)			1.00	50.0	
Spike Blank(SB)			1.00		
Matrix Spike(MS)			1.16		
Matrix Spike Dup(MSD)			1.19		
Duplicate(DUP)			1.08		
1 QC [C]	FA34018-1	5	1.25		
2	2		1.31		
3	3		1.15		
4	4		1.30		
5	5		1.14		
6	6		1.24		
7	7		1.23		
8	FA33881-1R	1	1.10		
9	8R		1.10		
10	FA33462-2R		1.06		
11	4R		1.14		
12	10R		1.20		
13	FA34019-1	5	1.18		
14	FA33973-3	1	1.33		
15	FA34023-1	2	1.25		
16	FA33933-1	1	0.51		PAint CHIPS, ½ wt due to limited sample & MAtriv. DB 5/19/16
17	2		0.50		
18	3		0.50		
19					
20					
21 [E]					
22 [E]					
23 [E]					
24 [E]					

5/19/16

Analyst: [redacted] Date: 5/19/16

QC Review: _____ Date: _____

A Used for SB, MS, MSD
B For reagent volumes used consult SOP MET 104, current revision
C Parent sample used to prepare MS, MSD, DUP
D Bottle Number
E Additional Matrix QC

icpsoildigestionlog012010.xls Rev 01/20/10 DM

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General Chemistry

QC Data Summaries

Includes the following where applicable:

- Percent Solids Raw Data Summary

Percent Solids Raw Data Summary

Job Number: FA33973
Account: ARCTXEL Arcadis-US, Inc
Project: Castner Range; Ft Bliss, TX

Sample: FA33973-1 **Analyzed:** 18-MAY-16 by JL **Method:** SM19 2540G
ClientID: FTBL-SED-29-0-6-050916-QA

Wet Weight (Total)	12.57	g
Tare Weight	1.13	g
Dry Weight (Total)	12.43	g
Solids, Percent	98.8	%

Sample: FA33973-2 **Analyzed:** 18-MAY-16 by JL **Method:** SM19 2540G
ClientID: FTBL-SED-12-0-6-051016-QA

Wet Weight (Total)	10.91	g
Tare Weight	1.13	g
Dry Weight (Total)	10.91	g
Solids, Percent	100	%

Sample: FA33973-3 **Analyzed:** 18-MAY-16 by JL **Method:** SM19 2540G
ClientID: FTBL-SED-02-0-6-051216-QA

Wet Weight (Total)	11.69	g
Tare Weight	1.11	g
Dry Weight (Total)	11.57	g
Solids, Percent	98.9	%

SGS ACCUTEST IS PART OF SGS, THE WORLD'S LEADING INSPECTION, VERIFICATION, TESTING AND CERTIFICATION COMPANY.

e-Hardcopy 2.0
Automated Report

Technical Report for

Arcadis-US, Inc

Castner Firing Range; Ft Bliss, TX

06261038.0001.0400

SGS Accutest Job Number: FA40657



Sampling Date: 01/18/17

Report to:

Arcadis-US, Inc
401 E Main St Suite 400
El Paso, TX 79901

Total number of pages in report: **169**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Client Service contact: (b) (6)

Certifications: FL(E83510), LA(03051), KS(E-10327), IL(200063), NC(573), NJ(FL002), NY(12022), SC(96038001) DoD ELAP(L-A-B L2229), AZ(AZ0806), CA(2937), TX(T104704404), PA(68-03573), VA(460177), AK, AR, GA, IA, KY, MA, NV, OK, OR, UT, WA

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Test results relate only to samples analyzed.

Sections: 1 2 3 4 5 6 7 8

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SGS ACCUTEST FA40657

Sample Summary

Arcadis-US, Inc

Job No: FA40657

Castner Firing Range; Ft Bliss, TX
Project No: 06261038.0001.0400

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA40657-1	01/18/17	15:20	IC	01/25/17	SO	Soil	FTBL-SED-064-0-6-011817-QA

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Arcadis-US, Inc **Job No:** FA40657

Site: Castner Firing Range; Ft Bliss, TX **Report Date:** 1/30/2017 1:21:51 PM

1 Sample(s) were collected on 01/18/2017 and were received at SGS Accutest Southeast (SASE) on 01/25/2017 properly preserved, at 3.8 Deg. C and intact. These Samples received an SASE job number of FA40657. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Metals By Method SW846 6010C

Matrix: SO **Batch ID:** MP31553

All samples were digested within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA40657-1DUP, FA40657-1MS, FA40657-1MSD, FA40657-1PS, FA40657-1SDL were used as the QC samples for metals.

Matrix Spike/Matrix Spike Duplicate Recovery(s) for Zinc are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

RPD(s) for Duplicate for Zinc are outside control limits for sample MP31553-D1. High RPD due to possible sample non-homogeneity.

RPD(s) for Serial Dilution for Zinc are outside control limits for sample MP31553-SD1. Probable cause is due to sample non-homogeneity.

Sample(s) FA40657-1 are for Arsenic, Zinc have elevated reporting limit(s) due to matrix interference.

MP31553-SD1 for Zinc: Serial dilution indicates possible matrix interference.

Wet Chemistry By Method SM19 2540G

Matrix: SO **Batch ID:** GN73822

Sample(s) FA40640-1DUP were used as the QC samples for Solids, Percent.

SGS Accutest (SASE) certifies that this report meets the project requirements for analytical data produced for the samples as received at SASE and as stated on the COC. SASE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the SASE Quality Manual except as noted above. This report is to be used in its entirety. SASE is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

Date: January 30 2017

Summary of Hits

Job Number: FA40657
Account: Arcadis-US, Inc
Project: Castner Firing Range; Ft Bliss, TX
Collected: 01/18/17

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
FA40657-1	**FTBL-SED-064-0-6-011817-QA**					
Arsenic [a]		6.2	3.7	1.9	mg/kg	SW846 6010C
Zinc [a]		124	7.5	1.9	mg/kg	SW846 6010C

(a) Elevated reporting limit(s) due to matrix interference.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	FTBL-SED-064-0-6-011817-QA		
Lab Sample ID:	FA40657-1	**Date Sampled:**	01/18/17
Matrix:	SO - Soil	**Date Received:**	01/25/17
		Percent Solids:	86.1
Project:	Castner Firing Range; Ft Bliss, TX		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic [a]	6.2	3.7	1.9	0.75	mg/kg	10	01/26/17	01/27/17	LM	SW846 6010C [1]	SW846 3050B [2]
Zinc [a]	124	7.5	1.9	1.1	mg/kg	10	01/26/17	01/27/17	LM	SW846 6010C [1]	SW846 3050B [2]

(1) Instrument QC Batch: MA13775
(2) Prep QC Batch: MP31553

(a) Elevated reporting limit(s) due to matrix interference.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection J = Indicates a result > = DL (MDL) but < LOQ

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- QC Evaluation: DOD QSM5 Limits

FA40657

SGS ACCUTEST

SGS Accutest Southeast
Chain of Custody

Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.accutest.com

SGS ACCUTEST JOB # : PAGE_____OF_____

SGS Accutest Quote # | SKIFF #

Project Information

Company Name: Arcadis
Address: 401 East Main Street, Suite 400
City: El Paso State: Texas Zip: 79901
Project Contac [redacted]
Phone #: [redacted]
Sampler(s) Name(s) (Printed)
Sampler 1 [redacted] Sampler 2:

Project Name: Closed Castner Firing Range
Street
City: El Paso State: Texas
Project # 06261038.0001.00400
Fax #
Client Purchase Order # 06261038.0001.00400

Analytical Information

Matrix Codes
DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air

SGS Accutest Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	CONTAINER INFORMATION: OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNAC	DI WATER	MEOH	Zinc	Arsenic	LAB USE ONLY
1	FTBL-SED- 064-0-6-011817-QA	1/18/17	1520	IC	S	1		X								X	X	

Turnaround Time (Business days)

X 10 Day (Business) Approved By: / Date:
7 Day
5 Day
3 Day *RUSH*
2 Day *RUSH*
1 Day *RUSH*
Other
Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULLT1 (EPA LEVEL 4)
- [x] EDD'S

Comments / Remarks

Send a copy to [redacted]

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:
[redacted]	1/18/17 FMS	2 FX	3 FX	01-25-17
5	Date Time:	6 Received By/Affiliation	7 Relinquished By/Affiliation	Date Time:

[redacted] 8

Lab Use Only : Cooler Temperature (s) Celsius: 3-8

5.1 5

FA40657: Chain of Custody
Page 1 of 3

SGS ACCUTEST - ORLANDO SAMPLE RECEIPT CONFIRMATION

SGS ACCUTEST'S JOB NUMBER: FA40657 CLIENT: Aecom PROJECT: CROSBY CASTNER

DATE/TIME RECEIVED: 01-25-17 09:45 {MM/DD/YY 24:00} NUMBER OF COOLERS RECEIVED: 1

METHOD OF DELIVERY: (FEDEX) UPS ACCUTEST COURIER DELIVERY OTHER: _____

AIRBILL NUMBERS: 7854 0068 8861

COOLER INFORMATION

- [ ] CUSTODY SEAL NOT PRESENT OR NOT INTACT
- [ ] CHAIN OF CUSTODY NOT RECEIVED (COC)
- [ ] ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- [ ] SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- [ ] TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- [ ] TRIP BLANK PROVIDED
- [X] TRIP BLANK NOT PROVIDED
- [X] TRIP BLANK NOT ON COC
- [ ] TRIP BLANK INTACT
- [ ] TRIP BLANK NOT INTACT
- [ ] RECEIVED WATER TRIP BLANK
- [ ] RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM _____ 5-GRAM _____

NUMBER OF 5035 FIELD KITS ? _____

NUMBER OF LAB FILTERED METALS ? _____

TEMPERATURE INFORMATION

- [ ] IR THERM ID 1 CORR. FACTOR +0.8
- [ ] OBSERVED TEMPS: 3.0
- [ ] CORRECTED TEMPS: 3.8 (USED FOR LIMS)

SAMPLE INFORMATION

- [ ] INCORRECT NUMBER OF CONTAINERS USED
- [ ] SAMPLE RECEIVED IMPROPERLY PRESERVED
- [ ] INSUFFICIENT VOLUME FOR ANALYSIS
- [ ] DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- [ ] ID'S ON COC DO NOT MATCH LABEL
- [ ] VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- [ ] BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- [ ] NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- [ ] UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- [ ] SAMPLE CONTAINER(S) RECEIVED BROKEN
- [ ] 5035 FIELD KITS NOT RECEIVED WITHIN 48 HOURS
- [ ] BULK VOA SOIL JARS NOT RECEIVED WITHIN 48 HOURS
- [ ] % SOLIDS JAR NOT RECEIVED
- [ ] RESIDUAL CHLORINE PRESENT LOT#_____

{APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS}

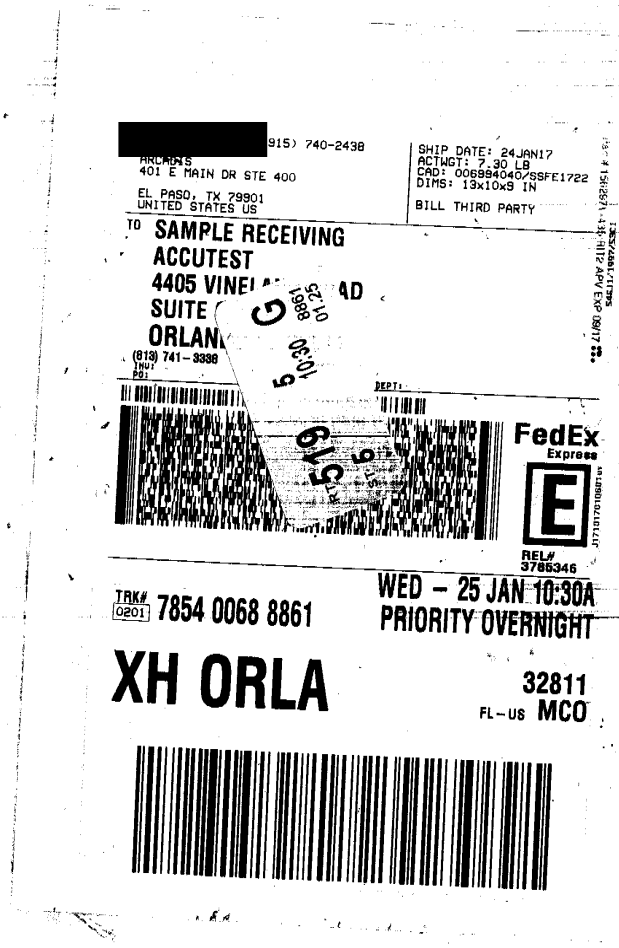
TEST STRIP LOT#s pH 0-3 230315 pH 10-12 219813A OTHER (specify) _____

SUMMARY OF COMMENTS: _____

TECHNICIAN SIGNATURE/DATE [redacted] VIEWER SIGNATURE/DATE [redacted]

NF 02/16 nfirmation 020116.xls

5.1 5



FA40657: Chain of Custody
Page 3 of 3

QC Evaluation: DOD QSM5 Limits

Job Number: FA40657
Account: Arcadis-US, Inc
Project: Castner Firing Range; Ft Bliss, TX
Collected: 01/18/17

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MP31553	SW846 6010C						
MP31553-B1	7440-38-2	Arsenic	BSP	REC	106	%	82-111
MP31553-B1	7440-66-6	Zinc	BSP	REC	107.2	%	82-113
MP31553-S1	7440-38-2	Arsenic	MS	REC	91.4	%	82-111
MP31553-S1	7440-66-6	Zinc	MS	REC	146.3 [a]	%	82-113
MP31553-S2	7440-38-2	Arsenic	MSD	REC	89.5	%	82-111
MP31553-S2	7440-38-2	Arsenic	MSD	RPD	11	%	20
MP31553-S2	7440-66-6	Zinc	MSD	REC	76.1 [a]	%	82-113
MP31553-S2	7440-66-6	Zinc	MSD	RPD	12.6	%	20
MP31553-D1	7440-38-2	Arsenic	DUP	RPD	17.6	%	20
MP31553-D1	7440-66-6	Zinc	DUP	RPD	25.4 [b]	%	20

(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
(b) High RPD due to possible sample non-homogeneity.

* Sample used for QC is not from job FA40657

Metals Analysis

6

QC Data Summaries

Includes the following where applicable:

- Instrument Runlogs
- Initial and Continuing Calibration Blanks
- Initial and Continuing Calibration Checks
- High and Low Check Standards
- Interfering Element Check Standards
- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries
- IDL and Linear Range Summaries

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: FA40657
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Firing Range; Ft Bliss, TX

File ID: SB012617M1.ICP Date Analyzed: 01/26/17 Methods: SW846 6010C
Analyst: LM Run ID: MA13774
Parameters: As,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
07:46	MA13774-STD1	1		STDA
07:51	MA13774-STD2	1		STDB
07:56	MA13774-STD3	1		STDC
08:01	MA13774-STD4	1		STDD
08:05	MA13774-HSTD1	1		
08:13	MA13774-ICV1	1		
08:21	MA13774-ICB1	1		
08:25	MA13774-CRIA1	1		
08:33	MA13774-ICSA1	1		
08:39	MA13774-ICSAB1	1		
08:51	MA13774-CCV1	1		
08:59	MA13774-CCB1	1		
09:03	ZZZZZZ	1		
09:08	ZZZZZZ	4		
09:12	ZZZZZZ	1		
09:16	ZZZZZZ	1		
09:20	ZZZZZZ	2		
09:24	MA13774-CCV2	1		
09:28	MA13774-CCB2	1		
11:58	MA13774-ICV2	1		
12:05	MA13774-CCV3	1		
12:11	MA13774-CCV4	1		
12:37	MA13774-ICV3	1		
12:43	MA13774-CCV5	1		
12:50	MA13774-CCB3	1		
12:55	MP31551-MB1	1		
12:59	MP31551-B1	1		
13:03	FA40614-8	1		(sample used for QC only; not part of login FA40657)
13:07	MP31551-D1	1		
13:12	MP31551-SD1	5		
13:16	MP31551-PS1	1		
13:20	MP31551-S1	1		
13:24	MP31551-S2	1		

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: FA40657
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Firing Range; Ft Bliss, TX

File ID: SB012617M1.ICP Date Analyzed: 01/26/17 Methods: SW846 6010C
Analyst: LM Run ID: MA13774
Parameters: As,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:28	ZZZZZZ	1		
13:32	ZZZZZZ	1		
13:36	MA13774-CCV6	1		
13:40	MA13774-CCB4	1		
13:44	ZZZZZZ	1		
13:48	ZZZZZZ	1		
13:52	ZZZZZZ	1		
13:57	ZZZZZZ	1		
14:01	ZZZZZZ	1		
14:05	ZZZZZZ	1		
14:09	ZZZZZZ	1		
14:13	ZZZZZZ	1		
14:17	ZZZZZZ	1		
14:22	ZZZZZZ	1		
14:26	MA13774-CCV7	1		
14:30	MA13774-CCB5	1		
14:34	ZZZZZZ	1		
14:38	ZZZZZZ	5		
14:43	ZZZZZZ	1		
14:47	ZZZZZZ	1		
14:51	ZZZZZZ	1		
14:55	ZZZZZZ	1		
14:59	ZZZZZZ	1		
15:04	MP31552-MB1	1		
15:08	MP31552-B1	1		
15:12	FA40613-1	1		(sample used for QC only; not part of login FA40657)
15:16	MA13774-CCV8	1		
15:20	MA13774-CCB6	1		
15:24	MP31552-D1	1		
15:28	MP31552-SD1	5		
15:33	MP31552-S1	1		
15:37	MP31552-S2	1		
15:41	ZZZZZZ	1		

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: FA40657
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Firing Range; Ft Bliss, TX

File ID: SB012617M1.ICP Date Analyzed: 01/26/17 Methods: SW846 6010C
Analyst: LM Run ID: MA13774
Parameters: As,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
15:45	ZZZZZZ	1		
15:49	ZZZZZZ	1		
15:53	FA40621-1	1		(sample used for QC only; not part of login FA40657)
15:57	ZZZZZZ	1		
16:02	ZZZZZZ	1		
16:06	MA13774-CCV9	1		
16:10	MA13774-CCB7	1		
16:14	ZZZZZZ	1		
16:18	FA40503-1	1		(sample used for QC only; not part of login FA40657)
16:22	MP31552-D2	1		
16:27	MP31552-D3	1		
16:31	MP31552-MB2	1		
16:35	MP31552-B2	1		
16:39	MP31552-MB3	1		
16:43	MP31552-B3	1		
16:47	MP31552-MB4	1		
16:52	MP31552-B4	1		
16:56	MA13774-CCV10	1		
17:00	MA13774-CCB8	1		
17:04	MP31552-MB5	1		
17:08	MP31552-B5	1		
17:12	MP31553-MB1	1		
17:16	MP31553-B1	1		
17:24	MP31553-D1	5		
17:28	MP31553-SD1	25		
17:33	MP31553-PS1	5		
17:37	MP31553-S1	5		
17:41	MP31553-S2	5		
---------->	Last reportable sample/prep for job FA40657			
17:45	MA13774-CCV11	1		
17:49	MA13774-CCB9	1		
17:53	ZZZZZZ	5		
18:05	ZZZZZZ	5		
18:09	ZZZZZZ	5		

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: FA40657
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Firing Range; Ft Bliss, TX

File ID: SB012617M1.ICP Date Analyzed: 01/26/17 Methods: SW846 6010C
Analyst: LM Run ID: MA13774
Parameters: As,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
18:13	ZZZZZZ	1		
18:17	ZZZZZZ	1		
18:22	ZZZZZZ	1		
18:26	MA13774-CRIA2	1		
18:30	MA13774-ICSA2	1		
18:34	MA13774-CCV12	1		
18:38	MA13774-CCB10	1		
18:42	MA13774-ICSAB2	1		
18:46	MA13774-CCV13	1		
18:50	MA13774-CCB11	1		

----------> Last reportable CCB for job FA40657
Refer to raw data for calibration curve and standards.

INTERNAL STANDARD SUMMARY

Login Number: FA40657
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Firing Range; Ft Bliss, TX

File ID: SB012617M1.ICP Date Analyzed: 01/26/17 Methods: SW846 6010C
Analyst: LM Run ID: MA13774
Parameters: As,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
07:46	MA13774-STD1	5715	43068	3521	2120
07:51	MA13774-STD2	5652	42711	3553	2041
07:56	MA13774-STD3	5471	41274	3538	1895
08:01	MA13774-STD4	5302	40092	3507	1776
08:05	MA13774-HSTD1	5276	39968	3478	1785
08:13	MA13774-ICV1	5427	41270	3500	1889
08:21	MA13774-ICB1	5657 R	42705 R	3524 R	2099 R
08:25	MA13774-CRIA1	5638	42702	3529	2069
08:33	MA13774-ICSA1	5113	37634	3412	1673
08:39	MA13774-ICSAB1	5096	37696	3409	1659
08:51	MA13774-CCV1	5427	41130	3479	1880
08:59	MA13774-CCB1	5638	42440	3507	2077
09:03	ZZZZZZ	5544	42198	3530	2007
09:08	ZZZZZZ	5611	42534	3565	2034
09:12	ZZZZZZ	5558	42061	3541	1993
09:16	ZZZZZZ	5555	41978	3518	1993
09:20	ZZZZZZ	5546	41948	3527	1983
09:24	MA13774-CCV2	5347	39859	3400	1838
09:28	MA13774-CCB2	5654	42409	3482	2082
11:58	MA13774-ICV2	5403	40532	3455	1858
12:05	MA13774-CCV3	5421	40340	3484	1854
12:11	MA13774-CCV4	5456	40594	3499	1868
12:37	MA13774-ICV3	5405	40626	3442	1862
12:43	MA13774-CCV5	5415	40648	3458	1875
12:50	MA13774-CCB3	5625	41985	3499	2065
12:55	MP31551-MB1	5650	42573	3540	2081
12:59	MP31551-B1	5520	41563	3466	1938
13:03	FA40614-8	5526	41670	3514	1993
13:07	MP31551-D1	5518	41657	3505	1988
13:12	MP31551-SD1	5607	42168	3497	2063
13:16	MP31551-PS1	5530	41688	3499	1973
13:20	MP31551-S1	5474	40974	3500	1891
13:24	MP31551-S2	5455	40962	3446	1888

INTERNAL STANDARD SUMMARY

Login Number: FA40657
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Firing Range; Ft Bliss, TX

File ID: SB012617M1.ICP Date Analyzed: 01/26/17 Methods: SW846 6010C
Analyst: LM Run ID: MA13774
Parameters: As,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
13:28	ZZZZZZ	5464	41574	3497	1980
13:32	ZZZZZZ	5472	41398	3469	1973
13:36	MA13774-CCV6	5430	40720	3436	1867
13:40	MA13774-CCB4	5628	42113	3470	2071
13:44	ZZZZZZ	5515	41609	3482	1991
13:48	ZZZZZZ	5521	41642	3515	1992
13:52	ZZZZZZ	5513	41844	3489	1993
13:57	ZZZZZZ	5487	41768	3485	1973
14:01	ZZZZZZ	5367	40273	3466	1897
14:05	ZZZZZZ	5518	41725	3503	2005
14:09	ZZZZZZ	5538	41829	3485	2004
14:13	ZZZZZZ	5394	39929	3416	1878
14:17	ZZZZZZ	5507	41181	3427	1981
14:22	ZZZZZZ	4994	36282	3339	1663
14:26	MA13774-CCV7	5454	40534	3418	1872
14:30	MA13774-CCB5	5627	42276	3439	2075
14:34	ZZZZZZ	5353	40472	3433	1889
14:38	ZZZZZZ	5022	36592	3355	1690
14:43	ZZZZZZ	No results reported for the elements associated with this internal standard.			
14:47	ZZZZZZ	5483	41609	3452	1994
14:51	ZZZZZZ	5518	41911	3457	2018
14:55	ZZZZZZ	5247	39612	3430	1844
14:59	ZZZZZZ	5630	43146	3530	2110
15:04	MP31552-MB1	5645	43293	3485	2103
15:08	MP31552-B1	5490	41859	3444	1961
15:12	FA40613-1	5358	40984	3413	1941
15:16	MA13774-CCV8	5398	40888	3423	1889
15:20	MA13774-CCB6	5591	42543	3444	2088
15:24	MP31552-D1	5366	40926	3424	1943
15:28	MP31552-SD1	5545	41989	3414	2042
15:33	MP31552-S1	5387	40717	3434	1861
15:37	MP31552-S2	5395	40773	3428	1863
15:41	ZZZZZZ	5356	40580	3392	1906

INTERNAL STANDARD SUMMARY

Login Number: FA40657
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Firing Range; Ft Bliss, TX

File ID: SB012617M1.ICP Date Analyzed: 01/26/17 Methods: SW846 6010C
Analyst: LM Run ID: MA13774
Parameters: As,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
15:45	ZZZZZZ	5406	40797	3425	1942
15:49	ZZZZZZ	5412	40392	3419	1921
15:53	FA40621-1	5250	39729	3387	1877
15:57	ZZZZZZ	5298	40313	3383	1914
16:02	ZZZZZZ	5315	40292	3413	1879
16:06	MA13774-CCV9	5398	40568	3373	1875
16:10	MA13774-CCB7	5632	42551	3416	2091
16:14	ZZZZZZ	5634	42698	3459	2081
16:18	FA40503-1	5380	40486	3403	1911
16:22	MP31552-D2	5389	40435	3380	1910
16:27	MP31552-D3	5269	39662	3359	1872
16:31	MP31552-MB2	5454	40317	3397	1930
16:35	MP31552-B2	5442	40319	3385	1858
16:39	MP31552-MB3	5670	42933	3447	2095
16:43	MP31552-B3	5552	41570	3421	1948
16:47	MP31552-MB4	5677	42873	3452	2102
16:52	MP31552-B4	5544	41514	3426	1953
16:56	MA13774-CCV10	5442	40525	3377	1882
17:00	MA13774-CCB8	5617	42764	3382	2085
17:04	MP31552-MB5	5724	43357	3458	2120
17:08	MP31552-B5	5530	41459	3383	1946
17:12	MP31553-MB1	5675	42926	3442	2107
17:16	MP31553-B1	5538	41502	3401	1951
17:24	MP31553-D1	6766	50446	4152	1986
17:28	MP31553-SD1	6066	45557	3678	2046
17:33	MP31553-PS1	7601 !	57009 !	4700 !	1927
17:37	MP31553-S1	7252 !	54242 !	4473 !	1938
17:41	MP31553-S2	7282 !	55028 !	4519 !	1945
17:45	MA13774-CCV11	5388	40810	3360	1893
17:49	MA13774-CCB9	5570	42325	3374	2097
17:53	ZZZZZZ	5969	45060	3608	2050
18:05	ZZZZZZ	5917	44414	3583	2061
18:09	ZZZZZZ	6049	45384	3705	1965

INTERNAL STANDARD SUMMARY

Login Number: FA40657
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Firing Range; Ft Bliss, TX

File ID: SB012617M1.ICP Date Analyzed: 01/26/17 Methods: SW846 6010C
Analyst: LM Run ID: MA13774
Parameters: As,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
18:13	ZZZZZZ	5917	44432	3573	2067
18:17	ZZZZZZ	5907	43891	3592	2057
18:22	ZZZZZZ	5977	44222	3655	2017
18:26	MA13774-CRIA2	5633	42272	3386	2058
18:30	MA13774-ICSA2	5075	37420	3247	1678
18:34	MA13774-CCV12	5424	40590	3338	1887
18:38	MA13774-CCB10	5603	42456	3361	2091
18:42	MA13774-ICSAB2	5059	37372	3232	1658
18:46	MA13774-CCV13	5436	40792	3356	1893
18:50	MA13774-CCB11	5594	42261	3348	2093

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium (2243)	60-125 %
Istd#2	Yttrium (3600)	60-125 %
Istd#3	Yttrium (3710)	60-125 %
Istd#4	Indium	60-125 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA40657
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Firing Range; Ft Bliss, TX

File ID: SB012617M1.ICP Date Analyzed: 01/26/17 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA13774 Units: ug/l

Time:			08:21		08:59		09:28		12:50	
Sample ID:			ICB1		CCB1		CCB2		CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	anr							
Antimony	6.0	1	anr							
Arsenic	10	1.3	-0.60	<10	-1.2	<10	-0.70	<10	0.20	<10
Barium	200	1	anr							
Beryllium	4.0	.2	anr							
Cadmium	5.0	.2	anr							
Calcium	1000	50	anr							
Chromium	10	1	anr							
Cobalt	50	.2	anr							
Copper	25	1	anr							
Iron	300	17	anr							
Lead	5.0	1	anr							
Magnesium	5000	35	anr							
Manganese	15	.5	anr							
Molybdenum	50	.3	anr							
Nickel	40	.4	anr							
Potassium	10000	200	anr							
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500	anr							
Strontium	10	.5								
Thallium	10	1.1	anr							
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5	anr							
Zinc	20	3	-0.10	<20	0.0	<20	0.0	<20	0.10	<20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA40657
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Firing Range; Ft Bliss, TX

File ID: SB012617M1.ICP Date Analyzed: 01/26/17 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA13774 Units: ug/l

Time:			13:40		14:30		15:20		16:10	
Sample ID:			CCB4		CCB5		CCB6		CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	anr							
Antimony	6.0	1	anr							
Arsenic	10	1.3	0.50	<10	0.20	<10	0.50	<10	0.0	<10
Barium	200	1	anr							
Beryllium	4.0	.2	anr							
Cadmium	5.0	.2	anr							
Calcium	1000	50	anr							
Chromium	10	1	anr							
Cobalt	50	.2	anr							
Copper	25	1	anr							
Iron	300	17	anr							
Lead	5.0	1	anr							
Magnesium	5000	35	anr							
Manganese	15	.5	anr							
Molybdenum	50	.3	anr							
Nickel	40	.4	anr							
Potassium	10000	200	anr							
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500	anr							
Strontium	10	.5								
Thallium	10	1.1	anr							
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5	anr							
Zinc	20	3	0.10	<20	0.40	<20	0.10	<20	0.10	<20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA40657
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Firing Range; Ft Bliss, TX

File ID: SB012617M1.ICP Date Analyzed: 01/26/17 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA13774 Units: ug/l

Time:			17:00		17:49		18:38		18:50	
Sample ID:			CCB8		CCB9		CCB10		CCB11	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	anr							
Antimony	6.0	1	anr							
Arsenic	10	1.3	0.50	<10	0.60	<10	0.0	<10	-0.30	<10
Barium	200	1	anr							
Beryllium	4.0	.2	anr							
Cadmium	5.0	.2	anr							
Calcium	1000	50	anr							
Chromium	10	1	anr							
Cobalt	50	.2	anr							
Copper	25	1	anr							
Iron	300	17	anr							
Lead	5.0	1	anr							
Magnesium	5000	35	anr							
Manganese	15	.5	anr							
Molybdenum	50	.3	anr							
Nickel	40	.4	anr							
Potassium	10000	200	anr							
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500	anr							
Strontium	10	.5								
Thallium	10	1.1	anr							
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5	anr							
Zinc	20	3	0.0	<20	0.0	<20	0.0	<20	0.0	<20

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA40657
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Firing Range; Ft Bliss, TX

File ID: SB012617M1.ICP Date Analyzed: 01/26/17 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA13774 Units: ug/l

Time:		08:13			08:51			09:24	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	2000	2030	101.5	2000	2050	102.5	2000	2070	103.5
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium	anr								
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	anr								
Magnesium	anr								
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	2000	2010	100.5	2000	2060	103.0	2000	2110	105.5

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA40657
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Firing Range; Ft Bliss, TX

File ID: SB012617M1.ICP Date Analyzed: 01/26/17 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA13774 Units: ug/l

Time:		11:58			12:05			12:11	
Sample ID:	ICV	ICV2		CCV	CCV3		CCV	CCV4	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	2000	1990	99.5	2000	2000	100.0	2000	1880	94.0
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium	anr								
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	anr								
Magnesium	anr								
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	2000	2000	100.0	2000	2070	103.5	2000	1930	96.5

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA40657
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Firing Range; Ft Bliss, TX

File ID: SB012617M1.ICP Date Analyzed: 01/26/17 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA13774 Units: ug/l

Time:		12:37			12:43			13:36	
Sample ID:	ICV	ICV3		CCV	CCV5		CCV	CCV6	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	2000	2020	101.0	2000	1950	97.5	2000	1940	97.0
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium	anr								
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	anr								
Magnesium	anr								
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	2000	2020	101.0	2000	1970	98.5	2000	1980	99.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA40657
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Firing Range; Ft Bliss, TX

File ID: SB012617M1.ICP Date Analyzed: 01/26/17 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA13774 Units: ug/l

Time:		14:26			15:16			16:06	
Sample ID:	CCV	CCV7		CCV	CCV8		CCV	CCV9	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	2000	1930	96.5	2000	1990	99.5	2000	1970	98.5
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium	anr								
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	anr								
Magnesium	anr								
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	2000	1980	99.0	2000	1970	98.5	2000	1990	99.5

(*) Outside of QC limits
(anr) Analyte not requested

SGS ACCUTEST FA40657

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA40657
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Firing Range; Ft Bliss, TX

File ID: SB012617M1.ICP Date Analyzed: 01/26/17 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA13774 Units: ug/l

Time:		16:56			17:45			18:34	
Sample ID:	CCV	CCV10		CCV	CCV11		CCV	CCV12	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	2000	1950	97.5	2000	2010	100.5	2000	1990	99.5
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium	anr								
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	anr								
Magnesium	anr								
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	2000	1980	99.0	2000	1980	99.0	2000	1980	99.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA40657
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Firing Range; Ft Bliss, TX

File ID: SB012617M1.ICP Date Analyzed: 01/26/17 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA13774 Units: ug/l

Time:		18:46	
Sample ID:	CCV	CCV13	
Metal	True	Results	% Rec
Aluminum	anr		
Antimony	anr		
Arsenic	2000	1990	99.5
Barium	anr		
Beryllium	anr		
Cadmium	anr		
Calcium	anr		
Chromium	anr		
Cobalt	anr		
Copper	anr		
Iron	anr		
Lead	anr		
Magnesium	anr		
Manganese	anr		
Molybdenum	anr		
Nickel	anr		
Potassium	anr		
Selenium	anr		
Silver	anr		
Sodium	anr		
Strontium			
Thallium	anr		
Tin			
Titanium			
Vanadium	anr		
Zinc	2000	1980	99.0

(*) Outside of QC limits
(anr) Analyte not requested

HIGH STANDARD CHECK SUMMARY

Login Number: FA40657
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Firing Range; Ft Bliss, TX

File ID: SB012617M1.ICP Date Analyzed: 01/26/17 Methods: SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA13774 Units: ug/l

Time:		08:05	
Sample ID:	HSTD	HSTD1	
Metal	True	Results	% Rec
Aluminum	anr		
Antimony	anr		
Arsenic	4000	3990	99.8
Barium	anr		
Beryllium	anr		
Cadmium	anr		
Calcium	anr		
Chromium	anr		
Cobalt	anr		
Copper	anr		
Iron	anr		
Lead	anr		
Magnesium	anr		
Manganese	anr		
Molybdenum	anr		
Nickel	anr		
Potassium	anr		
Selenium	anr		
Silver	anr		
Sodium	anr		
Strontium			
Thallium	anr		
Tin			
Titanium			
Vanadium	anr		
Zinc	4000	3930	98.3

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: FA40657
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Firing Range; Ft Bliss, TX

File ID: SB012617M1.ICP Date Analyzed: 01/26/17 Methods: SW846 6010C
QC Limits: CRI 70-130% CRIA 70-130% Run ID: MA13774 Units: ug/l

Time:			08:25		18:26	
Sample ID:	CRI	CRIA	CRIA1		CRIA2	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	400	200	anr			
Antimony	10	5.0	anr			
Arsenic	20	10	10.1	101.0	10.0	100.0
Barium	400	200	anr			
Beryllium	10	5.0	anr			
Cadmium	10	5.0	anr			
Calcium	2000	1000	anr			
Chromium	20	10	anr			
Cobalt	100	50	anr			
Copper	50	25	anr			
Iron	600	300	anr			
Lead	10	5.0	anr			
Magnesium	10000	5000	anr			
Manganese	30	15	anr			
Molybdenum	100	50	anr			
Nickel	80	40	anr			
Potassium	20000	10000	anr			
Selenium	20	10	anr			
Silver	20	10	anr			
Sodium	20000	10000	anr			
Strontium	20	10				
Thallium	20	10	anr			
Tin	100	50				
Titanium	20	10				
Vanadium	100	50	anr			
Zinc	40	20	21.0	105.0	21.4	107.0

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: FA40657
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Firing Range; Ft Bliss, TX

File ID: SB012617M1.ICP Date Analyzed: 01/26/17 Methods: SW846 6010C
QC Limits: 80 to 120 % Recovery Run ID: MA13774 Units: ug/l

Time:			08:33		08:39		18:30		18:42	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1		ICSA2		ICSAB2	
Metal	True	True	Results	% Rec	Results	% Rec	Results	% Rec	Results	% Rec
Aluminum	500000	500000	490000	98.0	492000	98.4	497000	99.4	501000	100.2
Antimony		1000	0.0		1050	105.0	-2.7		1060	106.0
Arsenic		1000	-0.10		1100	110.0	-0.20		1140	114.0
Barium		500	-0.30		502	100.4	0.10		516	103.2
Beryllium		500	0.0		493	98.6	0.0		487	97.4
Cadmium		1000	0.10		935	93.5	-0.10		955	95.5
Calcium	500000	500000	462000	92.4	468000	93.6	467000	93.4	477000	95.4
Chromium		500	0.0		498	99.6	-0.30		505	101.0
Cobalt		500	0.50		470	94.0	0.40		478	95.6
Copper		500	-0.10		525	105.0	-1.0		523	104.6
Iron	200000	200000	182000	91.0	181000	90.5	181000	90.5	180000	90.0
Lead		1000	-0.10		961	96.1	0.50		973	97.3
Magnesium	500000	500000	497000	99.4	491000	98.2	504000	100.8	500000	100.0
Manganese		500	-0.90		490	98.0	-1.1		493	98.6
Molybdenum		1000	0.20		959	95.9	-0.60		960	96.0
Nickel		1000	0.0		938	93.8	-0.20		975	97.5
Potassium			108		57.9		13.1		20.3	
Selenium		1000	0.0		1030	103.0	2.4		1070	107.0
Silver		1000	0.40		913	91.3	0.0		920	92.0
Sodium			147		177		159		174	
Strontium		1000	0.30		1020	102.0	-0.20		1020	102.0
Thallium		1000	1.2		988	98.8	0.50		997	99.7
Tin		1000	2.3		947	94.7	2.8		972	97.2
Titanium		1000	0.0		1030	103.0	-0.30		1020	102.0
Vanadium		500	0.40		467	93.4	1.0		472	94.4
Zinc		1000	-1.3		936	93.6	-1.2		953	95.3

(*) Outside of QC limits
(anr) Analyte not requested

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: FA40657
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Firing Range; Ft Bliss, TX

File ID: SA012717M1.ICP Date Analyzed: 01/27/17 Methods: SW846 6010C
Analyst: LM Run ID: MA13775
Parameters: As,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
07:48	MA13775-STD1	1		STDA
07:53	MA13775-STD2	1		STDB
07:57	MA13775-STD3	1		STDC
08:00	MA13775-STD4	1		STDD
08:05	MA13775-HSTD1	1		
08:11	MA13775-ICV1	1		
08:18	MA13775-ICB1	1		
08:26	MA13775-CRIA1	1		
08:34	MA13775-ICSA1	1		
08:43	MA13775-ICSAB1	1		
08:50	MA13775-CCV1	1		
08:56	MA13775-CCB1	1		
09:01	MP31554-MB1	1		
09:05	MP31554-B1	1		
09:09	MP31554-B2	1		
09:14	ZZZZZZ	1		
09:18	ZZZZZZ	1		
09:22	ZZZZZZ	1		
09:27	ZZZZZZ	1		
09:31	ZZZZZZ	1		
09:36	ZZZZZZ	1		
09:40	ZZZZZZ	1		
09:45	MA13775-CCV2	1		
09:49	MA13775-CCB2	1		
09:53	ZZZZZZ	1		
09:58	ZZZZZZ	1		
10:02	ZZZZZZ	1		
10:07	ZZZZZZ	1		
10:11	ZZZZZZ	1		
10:15	ZZZZZZ	1		
10:20	ZZZZZZ	1		
10:24	ZZZZZZ	1		
10:29	ZZZZZZ	1		

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: FA40657
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Firing Range; Ft Bliss, TX

File ID: SA012717M1.ICP Date Analyzed: 01/27/17 Methods: SW846 6010C
Analyst: LM Run ID: MA13775
Parameters: As,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
10:33	ZZZZZZ	1		
10:38	MA13775-CCV3	1		
10:42	MA13775-CCB3	1		
10:46	ZZZZZZ	1		
10:51	ZZZZZZ	1		
10:55	ZZZZZZ	1		
11:00	MP31555-MB1	1		
11:04	MP31555-B1	1		
11:08	MP31555-B2	1		
11:13	ZZZZZZ	1		
11:17	ZZZZZZ	1		
11:22	ZZZZZZ	1		
11:26	ZZZZZZ	1		
11:30	MA13775-CCV4	1		
11:35	MA13775-CCB4	1		
11:43	ZZZZZZ	1		
11:48	ZZZZZZ	1		
11:52	ZZZZZZ	1		
11:57	ZZZZZZ	1		
12:01	ZZZZZZ	4		
12:06	ZZZZZZ	4		
12:10	ZZZZZZ	20		
12:15	ZZZZZZ	4		
12:19	FA40657-1	10		
12:24	MA13775-CCV5	1		
12:28	MA13775-CCB5	1		
12:32	MP31553-D1	10		
12:37	MP31553-S1	10		
12:41	MP31553-S2	10		
12:45	MP31553-PS1	10		
12:50	MP31553-SD1	50		
---------->	Last reportable sample/prep for job FA40657			
12:54	ZZZZZZ	1		
13:03	ZZZZZZ	10		

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: FA40657
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Firing Range; Ft Bliss, TX

File ID: SA012717M1.ICP Date Analyzed: 01/27/17 Methods: SW846 6010C
Analyst: LM Run ID: MA13775
Parameters: As,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:08	MP31557-MB1	1		
13:12	MP31557-B1	1		
13:16	MA13775-CCV6	1		
13:21	MA13775-CCB6	1		
13:50	MA13775-ICV2	1		
13:57	MA13775-CCV7	1		
14:05	MA13775-CCB7	1		
14:09	FA40645-1	1		(sample used for QC only; not part of login FA40657)
14:14	MP31557-D1	1		
14:18	MP31557-SD1	5		
14:23	MP31557-PS1	1		
14:27	MP31557-S1	1		
14:31	MP31557-S2	1		
14:36	ZZZZZZ	2		
14:40	ZZZZZZ	1		
14:45	ZZZZZZ	1		
14:49	ZZZZZZ	1		
14:54	MA13775-CCV8	1		
14:58	MA13775-CCB8	1		
15:02	ZZZZZZ	1		
15:07	ZZZZZZ	1		
15:11	ZZZZZZ	1		
15:16	ZZZZZZ	1		
15:20	ZZZZZZ	1		
15:25	ZZZZZZ	1		
15:29	ZZZZZZ	1		
15:34	ZZZZZZ	1		
15:38	ZZZZZZ	1		
15:43	ZZZZZZ	1		
15:47	MA13775-CCV9	1		
15:51	MA13775-CCB9	1		
15:56	ZZZZZZ	1		
16:01	ZZZZZZ	1		

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: FA40657
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Firing Range; Ft Bliss, TX

File ID: SA012717M1.ICP Date Analyzed: 01/27/17 Methods: SW846 6010C
Analyst: LM Run ID: MA13775
Parameters: As,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
16:05	ZZZZZZ	1		
16:10	ZZZZZZ	1		
16:14	ZZZZZZ	1		
16:19	ZZZZZZ	1		
16:23	MP31558-MB1	1		
16:28	MP31558-B1	1		
16:32	FA40660-2	1		(sample used for QC only; not part of login FA40657)
16:36	MP31558-D1	1		
16:41	MA13775-CCV10	1		
16:45	MA13775-CCB10	1		
16:50	MP31558-SD1	5		
16:54	MP31558-PS1	1		
16:58	MP31558-S1	1		
17:03	MP31558-S2	1		
17:07	ZZZZZZ	1		
17:11	ZZZZZZ	1		
17:16	ZZZZZZ	1		
17:20	ZZZZZZ	1		
17:25	ZZZZZZ	1		
17:29	ZZZZZZ	1		
17:34	MA13775-CCV11	1		
17:38	MA13775-CCB11	1		
17:42	ZZZZZZ	1		
17:47	ZZZZZZ	1		
17:51	ZZZZZZ	1		
17:56	MP31559-MB1	1		
18:00	MP31559-B1	1		
18:05	FA40672-1	1		(sample used for QC only; not part of login FA40657)
18:09	MP31559-D1	1		
18:14	MP31559-SD1	5		
18:18	MP31559-S1	1		
18:23	MP31559-S2	1		
18:27	MA13775-CCV12	1		

SGS Accutest Instrument Runlog
Inorganics Analyses

Login Number: FA40657
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Firing Range; Ft Bliss, TX

File ID: SA012717M1.ICP Date Analyzed: 01/27/17 Methods: SW846 6010C
Analyst: LM Run ID: MA13775
Parameters: As,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
18:31	MA13775-CCB12	1		
18:36	MP31559-MB2	1		
18:40	MP31559-B2	1		
19:20	MA13775-CCV13	1		
19:24	MA13775-CCB13	1		
20:10	MA13775-CRIA2	1		
20:15	MA13775-CCV14	1		
20:19	MA13775-CCB14	1		
20:24	MA13775-ICSA2	1		
20:28	MA13775-ICSAB2	1		
20:33	MA13775-CCV15	1		
20:37	MA13775-CCB15	1		

----------> Last reportable CCB for job FA40657
Refer to raw data for calibration curve and standards.

INTERNAL STANDARD SUMMARY

Login Number: FA40657
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Firing Range; Ft Bliss, TX

File ID: SA012717M1.ICP Date Analyzed: 01/27/17 Methods: SW846 6010C
Analyst: LM Run ID: MA13775
Parameters: As,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
07:48	MA13775-STD1	4067	31909	6514	1811
07:53	MA13775-STD2	3994	31696	6504	1788
07:57	MA13775-STD3	3800	30706	6349	1672
08:00	MA13775-STD4	3741	30832	6424	1613
08:05	MA13775-HSTD1	3707	30450	6360	1599
08:11	MA13775-ICV1	3901	31457	6408	1717
08:18	MA13775-ICB1	4026 R	31946 R	6588 R	1808 R
08:26	MA13775-CRIA1	4078	32388	6572	1839
08:34	MA13775-ICSA1	3606	29613	6118	1553
08:43	MA13775-ICSAB1	3543	29303	6135	1518
08:50	MA13775-CCV1	3894	31149	6385	1726
08:56	MA13775-CCB1	3991	31757	6509	1809
09:01	MP31554-MB1	3829	31274	6429	1792
09:05	MP31554-B1	3800	31372	6438	1748
09:09	MP31554-B2	3811	31164	6333	1745
09:14	ZZZZZZ	3759	30830	6203	1746
09:18	ZZZZZZ	3829	31207	6413	1784
09:22	ZZZZZZ	3846	31639	6510	1793
09:27	ZZZZZZ	3894	32052	6612	1821
09:31	ZZZZZZ	3805	30485	6262	1755
09:36	ZZZZZZ	3780	30506	6221	1750
09:40	ZZZZZZ	3871	31311	6503	1796
09:45	MA13775-CCV2	3892	31523	6530	1739
09:49	MA13775-CCB2	4035	32001	6625	1832
09:53	ZZZZZZ	3886	31242	6404	1798
09:58	ZZZZZZ	3784	30350	6255	1753
10:02	ZZZZZZ	3870	31509	6444	1804
10:07	ZZZZZZ	3783	30768	6362	1760
10:11	ZZZZZZ	3808	30727	6321	1765
10:15	ZZZZZZ	3893	31335	6359	1800
10:20	ZZZZZZ	3808	31013	6320	1768
10:24	ZZZZZZ	3858	31304	6499	1786
10:29	ZZZZZZ	3864	31625	6517	1804

INTERNAL STANDARD SUMMARY

Login Number: FA40657
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Firing Range; Ft Bliss, TX

File ID: SA012717M1.ICP Date Analyzed: 01/27/17 Methods: SW846 6010C
Analyst: LM Run ID: MA13775
Parameters: As,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
10:33	ZZZZZZ	3801	30504	6271	1756
10:38	MA13775-CCV3	3761	30284	6188	1677
10:42	MA13775-CCB3	4010	31911	6556	1821
10:46	ZZZZZZ	3863	31391	6479	1799
10:51	ZZZZZZ	3872	31401	6547	1802
10:55	ZZZZZZ	3926	31563	6451	1819
11:00	MP31555-MB1	3883	31174	6361	1795
11:04	MP31555-B1	3771	30862	6245	1728
11:08	MP31555-B2	3789	31213	6424	1744
11:13	ZZZZZZ	3912	31447	6493	1815
11:17	ZZZZZZ	3812	30620	6258	1757
11:22	ZZZZZZ	3839	30944	6301	1774
11:26	ZZZZZZ	3916	31637	6495	1810
11:30	MA13775-CCV4	3903	31720	6481	1734
11:35	MA13775-CCB4	4068	32150	6603	1837
11:43	ZZZZZZ	3800	30429	6189	1740
11:48	ZZZZZZ	3894	31610	6472	1801
11:52	ZZZZZZ	3881	31398	6426	1795
11:57	ZZZZZZ	3878	30774	6235	1778
12:01	ZZZZZZ	3969	31864	6370	1805
12:06	ZZZZZZ	3910	31678	6435	1789
12:10	ZZZZZZ	4023	32275	6452	1823
12:15	ZZZZZZ	3964	31838	6451	1802
12:19	FA40657-1	4726	37318	7515	1811
12:24	MA13775-CCV5	3921	31449	6341	1727
12:28	MA13775-CCB5	4052	31975	6514	1816
12:32	MP31553-D1	4396	35184	7188	1806
12:37	MP31553-S1	4400	34833	7036	1730
12:41	MP31553-S2	4595	36453	7307	1795
12:45	MP31553-PS1	4658	37328	7519	1790
12:50	MP31553-SD1	4176	33179	6756	1825
12:54	ZZZZZZ	5335 !	42762 !	8786 !	1685
13:03	ZZZZZZ	4058	31720	6293	1755

INTERNAL STANDARD SUMMARY

Login Number: FA40657
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Firing Range; Ft Bliss, TX

File ID: SA012717M1.ICP Date Analyzed: 01/27/17 Methods: SW846 6010C
Analyst: LM Run ID: MA13775
Parameters: As,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
13:08	MP31557-MB1	3953	31277	6456	1772
13:12	MP31557-B1	3886	31405	6398	1736
13:16	MA13775-CCV6	3935	31812	6428	1733
13:21	MA13775-CCB6	4081	32068	6447	1823
13:50	MA13775-ICV2	3922	31452	6291	1715
13:57	MA13775-CCV7	3950	31507	6320	1724
14:05	MA13775-CCB7	4104	31996	6300	1827
14:09	FA40645-1	3793	30798	6143	1710
14:14	MP31557-D1	3789	30933	6213	1708
14:18	MP31557-SD1	4051	32178	6481	1823
14:23	MP31557-PS1	3924	31388	6251	1747
14:27	MP31557-S1	3791	30495	6075	1658
14:31	MP31557-S2	3852	31114	6261	1690
14:36	ZZZZZZ	4580	36168	7231	1760
14:40	ZZZZZZ	3974	31614	6231	1776
14:45	ZZZZZZ	3909	31453	6199	1748
14:49	ZZZZZZ	3871	31450	6189	1730
14:54	MA13775-CCV8	3935	31226	6168	1704
14:58	MA13775-CCB8	4138	32139	6281	1819
15:02	ZZZZZZ	3872	31455	6172	1726
15:07	ZZZZZZ	3822	30945	5992	1703
15:11	ZZZZZZ	3978	32044	6226	1739
15:16	ZZZZZZ	3987	32083	6206	1759
15:20	ZZZZZZ	3932	31751	6259	1732
15:25	ZZZZZZ	3827	31152	6117	1705
15:29	ZZZZZZ	3866	31097	6035	1719
15:34	ZZZZZZ	3954	31520	6206	1765
15:38	ZZZZZZ	3834	31330	6137	1715
15:43	ZZZZZZ	3891	31536	6175	1731
15:47	MA13775-CCV9	4008	31521	6168	1724
15:51	MA13775-CCB9	4094	32026	6340	1807
15:56	ZZZZZZ	4058	33062	6563	1751
16:01	ZZZZZZ	3997	31588	6166	1775

INTERNAL STANDARD SUMMARY

Login Number: FA40657
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Firing Range; Ft Bliss, TX

File ID: SA012717M1.ICP Date Analyzed: 01/27/17 Methods: SW846 6010C
Analyst: LM Run ID: MA13775
Parameters: As,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
16:05	ZZZZZZ	4061	31995	6315	1806
16:10	ZZZZZZ	3944	31903	6237	1778
16:14	ZZZZZZ	3978	31980	6242	1788
16:19	ZZZZZZ	3986	31598	6229	1780
16:23	MP31558-MB1	4022	31513	6232	1771
16:28	MP31558-B1	3972	31886	6273	1753
16:32	FA40660-2	4062	31994	6301	1808
16:36	MP31558-D1	4052	31642	6201	1794
16:41	MA13775-CCV10	4019	31808	6223	1736
16:45	MA13775-CCB10	4130	32445	6372	1826
16:50	MP31558-SD1	4162	32508	6359	1835
16:54	MP31558-PS1	3971	31147	6039	1759
16:58	MP31558-S1	3938	31439	6213	1728
17:03	MP31558-S2	3975	31654	6251	1746
17:07	ZZZZZZ	4018	31634	6127	1783
17:11	ZZZZZZ	3984	31617	6115	1773
17:16	ZZZZZZ	4041	31962	6381	1790
17:20	ZZZZZZ	3792	30561	6052	1694
17:25	ZZZZZZ	3955	31324	6010	1746
17:29	ZZZZZZ	3875	30958	6001	1731
17:34	MA13775-CCV11	4015	31895	6239	1734
17:38	MA13775-CCB11	4165	32508	6333	1831
17:42	ZZZZZZ	3971	31604	6051	1769
17:47	ZZZZZZ	3984	31689	6155	1775
17:51	ZZZZZZ	3922	31587	6236	1755
17:56	MP31559-MB1	4089	31655	6202	1792
18:00	MP31559-B1	3999	31612	6119	1744
18:05	FA40672-1	3958	31812	6148	1752
18:09	MP31559-D1	3949	31951	6243	1755
18:14	MP31559-SD1	4160	32434	6247	1839
18:18	MP31559-S1	3936	31369	6058	1705
18:23	MP31559-S2	3923	31652	6152	1704
18:27	MA13775-CCV12	4028	32066	6284	1741

INTERNAL STANDARD SUMMARY

Login Number: FA40657
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Firing Range; Ft Bliss, TX

File ID: SA012717M1.ICP Date Analyzed: 01/27/17 Methods: SW846 6010C
Analyst: LM Run ID: MA13775
Parameters: As,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
18:31	MA13775-CCB12	4170	32198	6306	1831
18:36	MP31559-MB2	3999	32036	6109	1766
18:40	MP31559-B2	3907	31600	6142	1703
19:20	MA13775-CCV13	4022	32047	6243	1745
19:24	MA13775-CCB13	4114	32419	6394	1836
20:10	MA13775-CRIA2	4097	32619	6318	1847
20:15	MA13775-CCV14	3984	31528	6131	1738
20:19	MA13775-CCB14	4101	31942	6181	1821
20:24	MA13775-ICSA2	3667	29768	5892	1569
20:28	MA13775-ICSAB2	3653	29815	5908	1549
20:33	MA13775-CCV15	3965	31953	6218	1740
20:37	MA13775-CCB15	4120	32208	6252	1832

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium (2243)	60-125 %
Istd#2	Yttrium (3600)	60-125 %
Istd#3	Yttrium (3710)	60-125 %
Istd#4	Indium	60-125 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA40657
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Firing Range; Ft Bliss, TX

File ID: SA012717M1.ICP Date Analyzed: 01/27/17 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA13775 Units: ug/l

Time:			08:18		08:56		09:49		10:42	
Sample ID:			ICB1		CCB1		CCB2		CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	anr							
Antimony	6.0	1	anr							
Arsenic	10	1.3	-0.10	<10	-1.4	<10	-0.60	<10	-0.30	<10
Barium	200	1	anr							
Beryllium	4.0	.2	anr							
Cadmium	5.0	.2	anr							
Calcium	1000	50	anr							
Chromium	10	1	anr							
Cobalt	50	.2	anr							
Copper	25	1	anr							
Iron	300	17	anr							
Lead	5.0	1	anr							
Magnesium	5000	35	anr							
Manganese	15	.5	anr							
Molybdenum	50	.3	anr							
Nickel	40	.4	anr							
Potassium	10000	200	anr							
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500	anr							
Strontium	10	.5								
Thallium	10	1.1	anr							
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5	anr							
Zinc	20	3	-0.30	<20	-0.30	<20	-0.40	<20	-0.40	<20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA40657
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Firing Range; Ft Bliss, TX

File ID: SA012717M1.ICP Date Analyzed: 01/27/17 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA13775 Units: ug/l

Time: / Sample ID:			11:35 CCB4		12:28 CCB5		13:21 CCB6		14:05 CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	anr							
Antimony	6.0	1	anr							
Arsenic	10	1.3	-0.30	<10	-0.10	<10	-0.20	<10	-0.40	<10
Barium	200	1	anr							
Beryllium	4.0	.2	anr							
Cadmium	5.0	.2	anr							
Calcium	1000	50	anr							
Chromium	10	1	anr							
Cobalt	50	.2	anr							
Copper	25	1	anr							
Iron	300	17	anr							
Lead	5.0	1	anr							
Magnesium	5000	35	anr							
Manganese	15	.5	anr							
Molybdenum	50	.3	anr							
Nickel	40	.4	anr							
Potassium	10000	200	anr							
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500	anr							
Strontium	10	.5								
Thallium	10	1.1	anr							
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5	anr							
Zinc	20	3	-0.40	<20	-0.40	<20	-0.40	<20	0.0	<20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA40657
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Firing Range; Ft Bliss, TX

File ID: SA012717M1.ICP Date Analyzed: 01/27/17 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA13775 Units: ug/l

Time: / Sample ID:			14:58 CCB8		15:51 CCB9		16:45 CCB10		17:38 CCB11	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	anr							
Antimony	6.0	1	anr							
Arsenic	10	1.3	-0.10	<10	-0.50	<10	-0.60	<10	-0.60	<10
Barium	200	1	anr							
Beryllium	4.0	.2	anr							
Cadmium	5.0	.2	anr							
Calcium	1000	50	anr							
Chromium	10	1	anr							
Cobalt	50	.2	anr							
Copper	25	1	anr							
Iron	300	17	anr							
Lead	5.0	1	anr							
Magnesium	5000	35	anr							
Manganese	15	.5	anr							
Molybdenum	50	.3	anr							
Nickel	40	.4	anr							
Potassium	10000	200	anr							
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500	anr							
Strontium	10	.5								
Thallium	10	1.1	anr							
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5	anr							
Zinc	20	3	0.10	<20	0.10	<20	0.10	<20	-0.10	<20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA40657
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Firing Range; Ft Bliss, TX

File ID: SA012717M1.ICP Date Analyzed: 01/27/17 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA13775 Units: ug/l

Time: / Sample ID:			18:31 CCB12		19:24 CCB13		20:19 CCB14		20:37 CCB15	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	anr							
Antimony	6.0	1	anr							
Arsenic	10	1.3	0.60	<10	0.10	<10	-0.80	<10	0.0	<10
Barium	200	1	anr							
Beryllium	4.0	.2	anr							
Cadmium	5.0	.2	anr							
Calcium	1000	50	anr							
Chromium	10	1	anr							
Cobalt	50	.2	anr							
Copper	25	1	anr							
Iron	300	17	anr							
Lead	5.0	1	anr							
Magnesium	5000	35	anr							
Manganese	15	.5	anr							
Molybdenum	50	.3	anr							
Nickel	40	.4	anr							
Potassium	10000	200	anr							
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500	anr							
Strontium	10	.5								
Thallium	10	1.1	anr							
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5	anr							
Zinc	20	3	0.10	<20	0.10	<20	0.0	<20	0.0	<20

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA40657
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Firing Range; Ft Bliss, TX

File ID: SA012717M1.ICP Date Analyzed: 01/27/17 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA13775 Units: ug/l

Time:		08:11			08:50			09:45	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	2000	2000	100.0	2000	1950	97.5	2000	1980	99.0
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium	anr								
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	anr								
Magnesium	anr								
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	2000	2020	101.0	2000	2010	100.5	2000	2030	101.5

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA40657
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Firing Range; Ft Bliss, TX

File ID: SA012717M1.ICP Date Analyzed: 01/27/17 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA13775 Units: ug/l

Time:		10:38			11:30			12:24	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	2000	2060	103.0	2000	1990	99.5	2000	1950	97.5
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium	anr								
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	anr								
Magnesium	anr								
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	2000	2150	107.5	2000	2030	101.5	2000	2000	100.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA40657
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Firing Range; Ft Bliss, TX

File ID: SA012717M1.ICP Date Analyzed: 01/27/17 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA13775 Units: ug/l

Time:		13:16			13:50			13:57	
Sample ID:	CCV	CCV6		ICV	ICV2		CCV	CCV7	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	2000	1940	97.0	2000	2020	101.0	2000	1940	97.0
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium	anr								
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	anr								
Magnesium	anr								
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	2000	1970	98.5	2000	2010	100.5	2000	1960	98.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA40657
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Firing Range; Ft Bliss, TX

File ID: SA012717M1.ICP Date Analyzed: 01/27/17 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA13775 Units: ug/l

Time:		14:54			15:47			16:41	
Sample ID:	CCV	CCV8		CCV	CCV9		CCV	CCV10	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	2000	1940	97.0	2000	1890	94.5	2000	1890	94.5
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium	anr								
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	anr								
Magnesium	anr								
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	2000	1970	98.5	2000	1920	96.0	2000	1910	95.5

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA40657
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Firing Range; Ft Bliss, TX

File ID: SA012717M1.ICP Date Analyzed: 01/27/17 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA13775 Units: ug/l

Time:		17:34			18:27			19:20	
Sample ID:	CCV	CCV11		CCV	CCV12		CCV	CCV13	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	2000	1900	95.0	2000	1900	95.0	2000	1930	96.5
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium	anr								
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	anr								
Magnesium	anr								
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	2000	1930	96.5	2000	1930	96.5	2000	1970	98.5

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA40657
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Firing Range; Ft Bliss, TX

File ID: SA012717M1.ICP Date Analyzed: 01/27/17 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA13775 Units: ug/l

Time:		20:15			20:33	
Sample ID:	CCV	CCV14		CCV	CCV15	
Metal	True	Results	% Rec	True	Results	% Rec
Aluminum	anr					
Antimony	anr					
Arsenic	2000	1940	97.0	2000	1950	97.5
Barium	anr					
Beryllium	anr					
Cadmium	anr					
Calcium	anr					
Chromium	anr					
Cobalt	anr					
Copper	anr					
Iron	anr					
Lead	anr					
Magnesium	anr					
Manganese	anr					
Molybdenum	anr					
Nickel	anr					
Potassium	anr					
Selenium	anr					
Silver	anr					
Sodium	anr					
Strontium						
Thallium	anr					
Tin						
Titanium						
Vanadium	anr					
Zinc	2000	2000	100.0	2000	1990	99.5

(*) Outside of QC limits
(anr) Analyte not requested

HIGH STANDARD CHECK SUMMARY

Login Number: FA40657
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Firing Range; Ft Bliss, TX

File ID: SA012717M1.ICP Date Analyzed: 01/27/17 Methods: SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA13775 Units: ug/l

Time:		08:05	
Sample ID:	HSTD	HSTD1	
Metal	True	Results	% Rec
Aluminum	anr		
Antimony	anr		
Arsenic	4000	4080	102.0
Barium	anr		
Beryllium	anr		
Cadmium	anr		
Calcium	anr		
Chromium	anr		
Cobalt	anr		
Copper	anr		
Iron	anr		
Lead	anr		
Magnesium	anr		
Manganese	anr		
Molybdenum	anr		
Nickel	anr		
Potassium	anr		
Selenium	anr		
Silver	anr		
Sodium	anr		
Strontium			
Thallium	anr		
Tin			
Titanium			
Vanadium	anr		
Zinc	4000	4060	101.5

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: FA40657
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Firing Range; Ft Bliss, TX

File ID: SA012717M1.ICP Date Analyzed: 01/27/17 Methods: SW846 6010C
QC Limits: CRI 70-130% CRIA 70-130% Run ID: MA13775 Units: ug/l

Time:			08:26		20:10	
Sample ID:	CRI	CRIA	CRIA1		CRIA2	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	400	200	anr			
Antimony	10	5.0	anr			
Arsenic	20	10	9.9	99.0	10.4	104.0
Barium	400	200	anr			
Beryllium	10	5.0	anr			
Cadmium	10	5.0	anr			
Calcium	2000	1000	anr			
Chromium	20	10	anr			
Cobalt	100	50	anr			
Copper	50	25	anr			
Iron	600	300	anr			
Lead	10	5.0	anr			
Magnesium	10000	5000	anr			
Manganese	30	15	anr			
Molybdenum	100	50	anr			
Nickel	80	40	anr			
Potassium	20000	10000	anr			
Selenium	20	10	anr			
Silver	20	10	anr			
Sodium	20000	10000	anr			
Strontium	20	10				
Thallium	20	10	anr			
Tin	100	50				
Titanium	20	10				
Vanadium	100	50	anr			
Zinc	40	20	21.6	108.0	22.3	111.5

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: FA40657
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Firing Range; Ft Bliss, TX

File ID: SA012717M1.ICP Date Analyzed: 01/27/17 Methods: SW846 6010C
QC Limits: 80 to 120 % Recovery Run ID: MA13775 Units: ug/l

Time:			08:34		08:43		20:24		20:28	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1		ICSA2		ICSAB2	
Metal	True	True	Results	% Rec	Results	% Rec	Results	% Rec	Results	% Rec
Aluminum	500000	500000	496000	99.2	500000	100.0	499000	99.8	508000	101.6
Antimony		1000	0.0		1100	110.0	3.9		1080	108.0
Arsenic		1000	-0.20		1150	115.0	0.10		1120	112.0
Barium		500	0.30		519	103.8	0.0		525	105.0
Beryllium		500	-0.10		505	101.0	-0.10		501	100.2
Cadmium		1000	0.0		973	97.3	-0.50		963	96.3
Calcium	500000	500000	477000	95.4	483000	96.6	474000	94.8	484000	96.8
Chromium		500	0.0		508	101.6	0.50		506	101.2
Cobalt		500	0.50		493	98.6	0.60		492	98.4
Copper		500	0.0		556	111.2	-1.3		548	109.6
Iron	200000	200000	184000	92.0	183000	91.5	184000	92.0	182000	91.0
Lead		1000	-0.20		999	99.9	2.4		988	98.8
Magnesium	500000	500000	529000	105.8	526000	105.2	526000	105.2	522000	104.4
Manganese		500	-0.20		509	101.8	-0.30		507	101.4
Molybdenum		1000	0.0		994	99.4	2.2		996	99.6
Nickel		1000	-0.10		995	99.5	0.20		979	97.9
Potassium			27.8		26.7		188		153	
Selenium		1000	0.10		1060	106.0	0.60		1050	105.0
Silver		1000	-0.40		986	98.6	-0.10		987	98.7
Sodium			145		181		582		562	
Strontium		1000	0.0		1060	106.0	-0.20		1030	103.0
Thallium		1000	0.50		1030	103.0	1.1		1020	102.0
Tin		1000	3.5		997	99.7	4.7		1000	100.0
Titanium		1000	0.10		1050	105.0	0.20		1020	102.0
Vanadium		500	-0.70		484	96.8	-0.50		478	95.6
Zinc		1000	-2.5		963	96.3	-2.3		950	95.0

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA40657
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Firing Range; Ft Bliss, TX

QC Batch ID: MP31553
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 01/26/17

Metal	RL	IDL	MDL	MB raw	final
Aluminum	10	.7	1.8		
Antimony	1.0	.05	.065		
Arsenic	0.50	.065	.1	-0.010	<0.50
Barium	10	.05	.05		
Beryllium	0.25	.01	.025		
Cadmium	0.20	.01	.025		
Calcium	250	2.5	2.5		
Chromium	0.50	.05	.05		
Cobalt	2.5	.01	.025		
Copper	1.3	.05	.05		
Iron	15	.85	.85		
Lead	1.0	.05	.05		
Magnesium	250	1.8	1.8		
Manganese	0.75	.025	.025		
Molybdenum	2.5	.015	.025		
Nickel	2.0	.02	.025		
Potassium	500	10	10		
Selenium	1.0	.12	.12		
Silver	0.50	.035	.041		
Sodium	500	25	25		
Strontium	0.50	.025	.025		
Thallium	0.50	.055	.055		
Tin	2.5	.045	.045		
Titanium	0.50	.025	.025		
Vanadium	2.5	.025	.025		
Zinc	1.0	.15	.15	0.20	<1.0

Associated samples MP31553: FA40657-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA40657
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Firing Range; Ft Bliss, TX

QC Batch ID: MP31553
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date:			01/26/17					01/26/17	
Metal	FA40657-1 Original DUP		RPD	QC Limits	FA40657-1 Original MS		Spikelot MPFLICP2 % Rec	QC Limits	
Aluminum									
Antimony	anr								
Arsenic	6.2	7.4 (a)	17.6	0-20	6.2	96.2 (a)	98.4	91.4	80-120
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron									
Lead	anr								
Magnesium									
Manganese									
Molybdenum	anr								
Nickel	anr								
Potassium									
Selenium	anr								
Silver	anr								
Sodium									
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	124	160 (a)	25.4*(b)	0-20	124	160 (a)	24.6	146.3(c)	80-120

Associated samples MP31553: FA40657-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Elevated reporting limit(s) due to matrix interference.
(b) High RPD due to possible sample non-homogeneity.
(c) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA40657
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Firing Range; Ft Bliss, TX

QC Batch ID: MP31553 Methods: SW846 6010C
Matrix Type: SOLID Units: mg/kg

Prep Date: 01/26/17

Metal	FA40657-1 Original	MSD	Spikelot MPFLICP2	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony	anr					
Arsenic	6.2	86.2 (a)	89.3	89.5	11.0	20
Barium	anr					
Beryllium	anr					
Cadmium	anr					
Calcium						
Chromium	anr					
Cobalt	anr					
Copper	anr					
Iron						
Lead	anr					
Magnesium						
Manganese						
Molybdenum	anr					
Nickel	anr					
Potassium						
Selenium	anr					
Silver	anr					
Sodium						
Strontium						
Thallium	anr					
Tin						
Titanium						
Vanadium	anr					
Zinc	124	141 (a)	22.3	76.1 (b)	12.6	20

Associated samples MP31553: FA40657-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Elevated reporting limit(s) due to matrix interference.
(b) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA40657
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Firing Range; Ft Bliss, TX

QC Batch ID: MP31553
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 01/26/17

Metal	BSP Result	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum				
Antimony	anr			
Arsenic	106	100	106.0	80-120
Barium	anr			
Beryllium	anr			
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt	anr			
Copper	anr			
Iron				
Lead	anr			
Magnesium				
Manganese				
Molybdenum	anr			
Nickel	anr			
Potassium				
Selenium	anr			
Silver	anr			
Sodium				
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium	anr			
Zinc	26.8	25	107.2	80-120

Associated samples MP31553: FA40657-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA40657
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Firing Range; Ft Bliss, TX

QC Batch ID: MP31553 Methods: SW846 6010C
Matrix Type: SOLID Units: ug/l

Prep Date: 01/26/17

Metal	FA40657-1 Original	SDL 10:25%DIF		QC Limits
Aluminum				
Antimony	anr			
Arsenic	166	162	2.2	0-10
Barium	anr			
Beryllium	anr			
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt	anr			
Copper	anr			
Iron				
Lead	anr			
Magnesium				
Manganese				
Molybdenum	anr			
Nickel	anr			
Potassium				
Selenium	anr			
Silver	anr			
Sodium				
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium	anr			
Zinc	3310	4240	27.9*(a)	0-10

Associated samples MP31553: FA40657-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Serial dilution indicates possible matrix interference.

POST DIGESTATE SPIKE SUMMARY

Login Number: FA40657
Account: ARCTXEL - Arcadis-US, Inc
Project: Castner Firing Range; Ft Bliss, TX

QC Batch ID: MP31553
Matrix Type: SOLID

Methods: SW846 6010C
Units: ug/l

Prep Date: 01/26/17

Metal	Sample ml	Final ml	FA40657-1 Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic	9.8	10	166	162.68	253.6	0.2	5	100	90.9	80-120
Barium										
Beryllium										
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper										
Iron										
Lead										
Magnesium										
Manganese										
Molybdenum										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc	9.8	10	3312	3245.76	3477	0.2	12.5	250	92.5	80-120

Associated samples MP31553: FA40657-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(**) Corr. sample result = Raw * (sample volume / final volume)
(anr) Analyte not requested

Instrument Detection Limits

Job Number: FA40657
Account: ARCTXEL Arcadis-US, Inc
Project: Castner Firing Range; Ft Bliss, TX

Instrument ID: SSTRACE1 **Effective Date:** 01/27/15

Analyte	IDL ug/l
Aluminum	14
Antimony	1
Arsenic	1.3
Barium	1
Beryllium	.2
Cadmium	.2
Calcium	50
Chromium	1
Cobalt	.2
Copper	1
Iron	17
Lead	1
Magnesium	35
Manganese	.5
Molybdenum	.3
Nickel	.4
Potassium	200
Selenium	2.4
Silicon	5
Silver	.7
Sodium	500
Strontium	.5
Sulfur	5
Thallium	1.1
Tin	.9
Titanium	.5
Vanadium	.5
Zinc	3

The above applies to the following instrument runs:
MA13775

Instrument Detection Limits

Job Number: FA40657
Account: ARCTXEL Arcadis-US, Inc
Project: Castner Firing Range; Ft Bliss, TX

Instrument ID: SSTRACE2 **Effective Date:** 01/27/15

Analyte	IDL ug/l
Aluminum	14
Antimony	1
Arsenic	1.3
Barium	1
Beryllium	.2
Cadmium	.2
Calcium	50
Chromium	1
Cobalt	.2
Copper	1
Iron	17
Lead	1
Magnesium	35
Manganese	.5
Molybdenum	.3
Nickel	.4
Potassium	200
Selenium	2.4
Silicon	5
Silver	.7
Sodium	500
Strontium	.5
Sulfur	5
Thallium	1.1
Tin	.9
Titanium	.5
Vanadium	.5
Zinc	3

The above applies to the following instrument runs:
MA13774

Instrument Linear Ranges

Job Number: FA40657
Account: ARCTXEL Arcadis-US, Inc
Project: Castner Firing Range; Ft Bliss, TX

Instrument ID: SSTRACE1 **Effective Date:** 08/13/13

Analyte	Linear Range ug/l
Aluminum	500000
Antimony	10000
Arsenic	10000
Barium	10000
Beryllium	10000
Cadmium	10000
Calcium	500000
Chromium	10000
Cobalt	10000
Copper	10000
Iron	500000
Lead	10000
Magnesium	500000
Manganese	10000
Molybdenum	10000
Nickel	10000
Potassium	80000
Selenium	10000
Silver	1000
Sodium	80000
Strontium	10000
Sulfur	10000
Thallium	10000
Tin	10000
Titanium	10000
Vanadium	10000
Zinc	10000

The above applies to the following instrument runs:
MA13775

Instrument Linear Ranges

Job Number: FA40657
Account: ARCTXEL Arcadis-US, Inc
Project: Castner Firing Range; Ft Bliss, TX

Instrument ID: SSTRACE2 **Effective Date:** 10/22/10

Analyte	Linear Range ug/l
Aluminum	500000
Antimony	10000
Arsenic	10000
Barium	10000
Beryllium	10000
Cadmium	10000
Calcium	500000
Chromium	10000
Cobalt	10000
Copper	10000
Iron	500000
Lead	10000
Magnesium	500000
Manganese	10000
Molybdenum	10000
Nickel	10000
Potassium	80000
Selenium	10000
Silver	1000
Sodium	80000
Strontium	10000
Thallium	10000
Tin	10000
Titanium	10000
Vanadium	10000
Zinc	10000

The above applies to the following instrument runs:
MA13774

Metals Analysis

Raw Data

Zoom In ▶ Zoom Out

Sample Name: Blank Acquired: 1/26/2017 7:46:46 Type: Cal
Method: 60102007_041712(v513) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.0010	.0011	-.0003	.0013	.0002	.0064	-.0002	.0005	.0004
Stddev	.0002	.0018	.0002	.0022	.0006	.0014	.0002	.0002	.0001
%RSD	19.28	170.8	69.73	163.5	370.4	21.74	106.1	35.00	21.71
#1	-.0008	-.0010	-.0005	.0038	.0004	.0078	-.0001	.0003	.0005
#2	-.0011	.0026	-.0002	.0003	.0006	.0065	-.0005	.0006	.0004
#3	-.0012	.0016	-.0001	-.0001	-.0005	.0050	.0000	.0005	.0004

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0018	.0020	-.0130	.0007	.0004	.0006	.0006	.0003	.0013
Stddev	.0001	.0005	.0027	.0012	.0001	.0001	.0009	.0001	.0009
%RSD	4.376	25.50	20.82	173.1	15.52	11.75	146.5	38.13	67.40
#1	.0019	.0019	-.0101	.0008	.0005	.0007	.0013	.0003	.0018
#2	.0018	.0025	-.0133	.0018	.0003	.0005	.0011	.0004	.0003
#3	.0018	.0015	-.0154	-.0005	.0004	.0006	-.0004	.0002	.0018

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0004	-.0015	.0047	.0008	-.0078	.0018	-.0036	.0002	.0022
Stddev	.0001	.0004	.0001	.0001	.0006	.0000	.0004	.0001	.0001
%RSD	18.79	26.61	1.919	15.12	7.799	1.491	10.68	65.01	3.862
#1	.0004	-.0011	.0048	.0009	-.0085	.0017	-.0040	.0002	.0022
#2	.0005	-.0019	.0046	.0006	-.0076	.0018	-.0032	.0003	.0021
#3	.0003	-.0015	.0047	.0008	-.0074	.0018	-.0036	.0001	.0022

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2120.1	5715.0	43068.	3521.2
Stddev	2.3	20.5	197.	23.3
%RSD	.10626	.35952	.45761	.66033
#1	2122.6	5734.8	42875.	3540.5
#2	2118.3	5693.8	43060.	3527.8
#3	2119.3	5716.4	43269.	3495.4

◀ Zoom In ▶ Zoom Out

Sample Name: LowStd Acquired: 1/26/2017 7:51:37 Type: Cal
Method: 60102007_041712(v513) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0261	1.921	.1012	5.434	4.694	3.464	2.842	1.342	.2539	.3176
Stddev	.0004	.003	.0002	.008	.015	.011	.000	.002	.0007	.0012
%RSD	1.618	.1340	.2299	.1392	.3143	.3069	.0152	.1498	.2870	.3632
#1	.0258	1.921	.1013	5.431	4.699	3.471	2.842	1.344	.2547	.3168
#2	.0266	1.923	.1010	5.443	4.706	3.469	2.841	1.341	.2539	.3189
#3	.0259	1.918	.1014	5.429	4.678	3.452	2.841	1.340	.2532	.3170

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.794	1.295	.3215	1.171	.5432	4.949	.6542	.6881	.1123	.0665
Stddev	.006	.003	.0019	.003	.0007	.008	.0002	.0010	.0003	.0002
%RSD	.3585	.2050	.5903	.2567	.1323	.1589	.0292	.1470	.2651	.2962
#1	1.798	1.297	.3209	1.173	.5435	4.944	.6541	.6878	.1123	.0666
#2	1.796	1.292	.3236	1.171	.5423	4.958	.6544	.6893	.1120	.0663
#3	1.786	1.296	.3199	1.167	.5437	4.945	.6540	.6873	.1125	.0667

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1331	.2676	7.456	.7345	.3093	.3256	1.657
Stddev	.0001	.0002	.020	.0017	.0013	.0007	.001
%RSD	.0931	.0616	.2619	.2255	.4181	.2214	.0621
#1	.1331	.2674	7.472	.7347	.3108	.3256	1.656
#2	.1330	.2676	7.462	.7360	.3085	.3263	1.658
#3	.1332	.2677	7.434	.7327	.3085	.3248	1.656

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2041.1	5652.2	42711.	3552.9
Stddev	1.4	4.1	172.	24.6
%RSD	.06800	.07203	.40233	.69140
#1	2042.3	5653.7	42582.	3545.0
#2	2039.6	5655.2	42644.	3533.3
#3	2041.6	5647.5	42906.	3580.5

◀ Zoom In ▶ Zoom Out

Sample Name: MidStd Acquired: 1/26/2017 7:56:40 Type: Cal
Method: 60102007_041712(v513) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1144	7.629	.4187	22.03	18.80	13.55	11.39	5.358	1.014	1.276
Stddev	.0017	.016	.0003	.04	.06	.01	.01	.006	.004	.004
%RSD	1.444	.2083	.0814	.1697	.3284	.0913	.0735	.1074	.3795	.3162
#1	.1140	7.619	.4184	22.00	18.73	13.55	11.39	5.359	1.012	1.271
#2	.1162	7.621	.4186	22.03	18.82	13.53	11.38	5.351	1.019	1.278
#3	.1129	7.648	.4191	22.07	18.84	13.56	11.40	5.363	1.013	1.278

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7.343	5.243	1.264	4.697	2.351	19.69	2.601	2.841	.4625	.2775
Stddev	.014	.004	.001	.014	.004	.03	.000	.001	.0008	.0003
%RSD	.1955	.0848	.0671	.2929	.1691	.1309	.0170	.0325	.1738	.0919
#1	7.342	5.238	1.265	4.691	2.348	19.68	2.601	2.840	.4617	.2773
#2	7.330	5.244	1.265	4.687	2.348	19.68	2.600	2.842	.4625	.2778
#3	7.358	5.247	1.263	4.713	2.355	19.72	2.601	2.842	.4633	.2776

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.6663	1.136	32.06	3.201	1.278	1.388	6.616
Stddev	.0005	.001	.09	.025	.004	.007	.004
%RSD	.0820	.1090	.2962	.7747	.3331	.4852	.0636
#1	.6665	1.136	31.95	3.187	1.274	1.386	6.616
#2	.6656	1.135	32.10	3.230	1.282	1.396	6.612
#3	.6667	1.137	32.12	3.187	1.279	1.384	6.620

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1894.5	5471.0	41274.	3537.6
Stddev	1.9	2.8	225.	10.5
%RSD	.10094	.05047	.54589	.29749
#1	1894.7	5467.8	41323.	3528.5
#2	1892.5	5472.9	41029.	3549.2
#3	1896.3	5472.1	41472.	3535.2

◀ Zoom In ▶ Zoom Out

Sample Name: HighStd Acquired: 1/26/2017 8:01:03 Type: Cal
Method: 60102007_041712(v513) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.2175	14.87	.8033	42.47	36.39	26.12	21.69	10.27	1.951	2.531
Stddev	.0008	.02	.0010	.05	.04	.03	.00	.00	.007	.003
%RSD	.3599	.1033	.1304	.1138	.1016	.1260	.0204	.0468	.3535	.1337
#1	.2184	14.89	.8023	42.47	36.39	26.15	21.69	10.27	1.948	2.532
#2	.2169	14.86	.8032	42.51	36.36	26.09	21.69	10.26	1.945	2.527
#3	.2173	14.88	.8043	42.42	36.43	26.13	21.68	10.27	1.958	2.534

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	14.20	10.12	2.421	8.980	4.433	38.33	4.925	5.608	.9064	.5337
Stddev	.02	.03	.010	.134	.003	.07	.005	.007	.0012	.0016
%RSD	.1517	.2611	.4178	1.495	.0660	.1949	.1092	.1256	.1280	.3056
#1	14.22	10.14	2.430	8.948	4.433	38.41	4.919	5.600	.9057	.5318
#2	14.18	10.11	2.410	8.864	4.436	38.27	4.926	5.611	.9058	.5349
#3	14.19	10.09	2.422	9.127	4.430	38.30	4.930	5.613	.9077	.5343

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.160	2.099	60.75	5.964	2.503	2.596	12.63
Stddev	.001	.002	.03	.023	.002	.005	.01
%RSD	.0686	.0898	.0491	.3919	.0659	.2115	.1011
#1	1.160	2.097	60.72	5.940	2.505	2.597	12.65
#2	1.159	2.099	60.77	5.964	2.503	2.590	12.63
#3	1.160	2.101	60.76	5.987	2.501	2.601	12.62

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1776.0	5302.4	40092.	3507.1
Stddev	1.3	5.3	135.	12.1
%RSD	.07168	.10024	.33698	.34629
#1	1776.3	5301.5	40210.	3495.8
#2	1777.1	5308.1	40121.	3519.9
#3	1774.6	5297.6	39945.	3505.5

Zoom In Zoom Out

Sample Name: HSTD Acquired: 1/26/2017 8:05:34 Type: QC
Method: 60102007_041712(v513) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4927	78.67	3.987	3.939	3.921	78.25	3.930	3.942	3.933	3.940
Stddev	.0026	.49	.007	.026	.026	.41	.002	.003	.004	.018
%RSD	.5285	.6246	.1881	.6628	.6641	.5191	.0439	.0760	.1076	.4432
#1	.4897	78.26	3.996	3.912	3.899	77.89	3.928	3.938	3.936	3.958
#2	.4945	78.52	3.983	3.942	3.915	78.16	3.931	3.944	3.928	3.937
#3	.4939	79.21	3.983	3.964	3.950	78.69	3.931	3.943	3.933	3.924
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	78.23	78.93	78.47	3.909	3.925	78.53	3.951	3.948	3.959	3.977
Stddev	.42	.47	.43	.023	.003	.41	.003	.005	.004	.013
%RSD	.5365	.6014	.5433	.5827	.0667	.5231	.0814	.1242	.0946	.3328
#1	77.93	78.44	78.07	3.915	3.924	78.21	3.955	3.953	3.955	3.992
#2	78.04	78.96	78.41	3.883	3.928	78.37	3.949	3.947	3.963	3.969
#3	78.71	79.38	78.92	3.928	3.923	78.99	3.949	3.944	3.959	3.969
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.841	3.920	3.905	3.873	3.932	3.920	3.926
Stddev	.005	.001	.025	.038	.009	.004	.006
%RSD	.1319	.0321	.6475	.9889	.2401	.1114	.1420
#1	3.835	3.921	3.883	3.889	3.936	3.918	3.920
#2	3.844	3.919	3.899	3.829	3.939	3.917	3.928
#3	3.843	3.919	3.932	3.900	3.921	3.925	3.931
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: HSTD Acquired: 1/26/2017 8:05:34 Type: QC
Method: 60102007_041712(v513) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1784.6	5275.8	39968.	3477.8
Stddev	1.3	10.4	57.	.6
%RSD	.07048	.19721	.14226	.01696
#1	1785.0	5285.1	40019.	3477.8
#2	1785.6	5277.8	39978.	3478.4
#3	1783.2	5264.6	39907.	3477.3

Zoom In Zoom Out

Sample Name: ICV Acquired: 1/26/2017 8:13:38 Type: QC
Method: 60102007_041712(v513) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2572	40.85	2.025	2.015	2.002	41.19	2.010	2.008	1.990	1.967
Stddev	.0007	.07	.004	.002	.002	.04	.002	.001	.001	.005
%RSD	.2594	.1659	.2064	.1173	.1155	.0895	.0948	.0387	.0345	.2419
#1	.2577	40.84	2.021	2.018	2.004	41.16	2.010	2.008	1.989	1.963
#2	.2565	40.78	2.027	2.014	1.999	41.18	2.009	2.008	1.991	1.972
#3	.2576	40.92	2.029	2.014	2.002	41.23	2.012	2.009	1.990	1.966
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	39.81	41.07	41.47	1.993	1.957	40.69	2.025	2.002	1.996	2.019
Stddev	.03	.06	.07	.009	.002	.02	.001	.002	.003	.004
%RSD	.0693	.1360	.1570	.4448	.0810	.0591	.0541	.1147	.1353	.1958
#1	39.81	41.10	41.39	1.984	1.958	40.69	2.027	2.004	1.994	2.015
#2	39.83	41.11	41.49	2.002	1.956	40.66	2.025	2.003	1.995	2.023
#3	39.78	41.01	41.52	1.993	1.959	40.71	2.025	2.000	1.999	2.020
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1329	2.037	1.932	1.996	2.047	2.107	2.005
Stddev	.0003	.003	.002	.005	.002	.003	.002
%RSD	.2364	.1359	.0936	.2449	.1034	.1608	.0983
#1	.1326	2.035	1.933	2.001	2.048	2.108	2.007
#2	.1330	2.035	1.932	1.995	2.044	2.103	2.003
#3	.1332	2.040	1.930	1.992	2.048	2.109	2.006
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: ICV Acquired: 1/26/2017 8:13:38 Type: QC
Method: 60102007_041712(v513) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1889.4	5426.7	41270.	3499.9
Stddev	2.8	5.1	21.	17.4
%RSD	.14598	.09448	.05116	.49710
#1	1886.2	5425.9	41245.	3514.3
#2	1891.1	5432.2	41284.	3504.8
#3	1891.0	5422.1	41279.	3480.6

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Zoom In Zoom Out

Sample Name: ICB Acquired: 1/26/2017 8:21:37 Type: QC
Method: 60102007_041712(v513) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0025	-.0006	-.0003	.0000	.0206	.0000	.0000	.0007	.0000
Stddev	.0006	.0099	.0004	.0003	.0001	.0103	.000	.000	.0002	.000
%RSD	636.8	388.7	60.83	108.6	338.1	50.13	677.7	352.6	25.45	660.8
#1	.0006	-.0074	-.0004	-.0005	.0001	.0267	.0000	-.0001	.0005	.0003
#2	-.0006	.0123	-.0011	.0000	.0000	.0264	.0000	.0001	.0008	-.0002
#3	.0003	.0028	-.0004	-.0003	.0000	.0087	.0000	-.0001	.0007	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0012	.0914	-.0279	.0000	.0000	.0062	-.0001	-.0008	-.0008	-.0002
Stddev	.0034	.0193	.0219	.000	.000	.0041	.0003	.0002	.0007	.0023
%RSD	271.9	21.14	78.53	108.1	248.3	65.33	219.4	28.45	83.72	999.5
#1	.0017	.0699	-.0036	.0000	.0001	.0026	.0001	-.0010	-.0016	.0006
#2	-.0049	.0971	-.0461	.0000	-.0001	.0106	.0000	-.0007	-.0005	-.0028
#3	-.0005	.1073	-.0340	.0000	-.0001	.0054	-.0005	-.0006	-.0003	.0015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0000	-.0001	.0000	.0002	-.0004	-.0001
Stddev	.0003	.0002	.0000	.000	.0002	.0001	.0000
%RSD	358.6	4282.	39.43	973.9	88.28	28.36	7.722
#1	.0000	.0002	-.0001	.0000	.0002	-.0003	-.0001
#2	.0002	.0000	-.0002	-.0001	.0003	-.0005	-.0001
#3	-.0004	-.0002	-.0001	.0000	.0000	-.0003	-.0001
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: ICB Acquired: 1/26/2017 8:21:37 Type: QC
Method: 60102007_041712(v513) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2099.2	5657.4	42705.	3523.6
Stddev	1.7	4.8	179.	16.8
%RSD	.07916	.08419	.41802	.47809
#1	2099.5	5651.9	42758.	3543.0
#2	2100.6	5660.9	42851.	3514.2
#3	2097.4	5659.2	42506.	3513.4

Zoom In Zoom Out

Sample Name: CRIA Acquired: 1/26/2017 8:25:50 Type: QC
Method: 60102007_041712(v513) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F.0080	.2087	.0101	.2019	.0051	1.028	.0051	.0517	.0109
Stddev	.0002	.0048	.0007	.0006	.0000	.006	.0000	.0001	.0005
%RSD	2.517	2.291	7.272	.2943	.5913	.6039	.4704	.2401	4.707
#1	.0081	.2117	.0102	.2019	.0050	1.026	.0051	.0517	.0114
#2	.0077	.2032	.0108	.2025	.0051	1.023	.0051	.0515	.0104
#3	.0080	.2113	.0093	.2013	.0051	1.035	.0051	.0517	.0108
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.0100								
Range	-20.00%								

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0253	.3069	10.02	5.143	.0155	.0492	10.07	.0415	.0046
Stddev	.0001	.0024	.06	.038	.0001	.0003	.04	.0003	.0003
%RSD	.5037	.7836	.5969	.7374	.5021	.6684	.4109	.8362	6.702
#1	.0253	.3056	9.978	5.179	.0154	.0493	10.02	.0412	.0049
#2	.0253	.3055	10.09	5.147	.0155	.0495	10.08	.0413	.0046
#3	.0255	.3097	10.00	5.103	.0156	.0489	10.11	.0419	.0043
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0042	.0104	.0240	.0521	.0098	.0099	.0102	.0485	.0210
Stddev	.0008	.0007	.0003	.0001	.0001	.0001	.0006	.0004	.0000
%RSD	20.20	6.280	1.346	.1137	.7919	1.490	5.690	.8063	.1874
#1	.0048	.0108	.0240	.0521	.0099	.0097	.0101	.0487	.0209
#2	.0032	.0108	.0244	.0521	.0099	.0100	.0097	.0481	.0210
#3	.0046	.0097	.0237	.0520	.0097	.0100	.0108	.0488	.0210
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CRIA Acquired: 1/26/2017 8:25:50 Type: QC
Method: 60102007_041712(v513) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2069.3	5638.2	42702.	3528.9
Stddev	2.3	7.7	125.	37.6
%RSD	.10943	.13622	.29364	1.0659
#1	2068.1	5638.2	42763.	3534.6
#2	2067.9	5630.5	42786.	3488.8
#3	2071.9	5645.9	42558.	3563.4

Zoom In Zoom Out

Sample Name: ICSA Acquired: 1/26/2017 8:33:22 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	489.8	-.0001	-.0003	.0000	462.1	.0001	.0005	.0000
Stddev	.0007	1.0	.0013	.0002	.000	5.2	.0001	.0001	.000
%RSD	213.5	.2123	1059.	70.07	90.55	1.124	67.04	17.82	1977.
#1	-.0004	490.7	.0013	-.0005	-.0001	468.1	.0002	.0006	.0001
#2	.0011	488.7	-.0014	-.0002	.0000	458.9	.0000	.0004	-.0004
#3	.0003	490.0	-.0002	-.0002	.0000	459.4	.0002	.0005	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	182.3	.1082	496.8	-.0009	.0002	.1465	.0000	-.0001
Stddev	.0003	.6	.0318	1.0	.0000	.0002	.0085	.0001	.0005
%RSD	293.3	.3093	29.38	.1957	3.520	116.2	5.771	893.3	388.2
#1	-.0002	182.9	.1373	497.8	-.0009	.0000	.1391	.0001	-.0005
#2	.0002	181.8	.1131	496.6	-.0009	.0002	.1557	.0001	-.0003
#3	-.0003	182.0	.0743	495.8	-.0009	.0004	.1447	-.0001	.0004
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0000	.0201	F.0023	.0003	.0000	.0012	.0004	-.0013
Stddev	.002	.0022	.0002	.0006	.0004	.000	.0005	.0002	.0001
%RSD	16380.	30410.	.8833	25.39	149.7	197.0	36.96	41.24	4.586
#1	-.0022	.0016	.0202	.0029	-.0002	-.0001	.0009	.0002	-.0012
#2	.0006	-.0026	.0203	.0017	.0005	.0000	.0017	.0005	-.0014
#3	.0016	.0010	.0199	.0024	.0006	.0000	.0010	.0004	-.0013
Check ?	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.0010					
Low Limit				-.0010					

Zoom In Zoom Out

Sample Name: ICSA Acquired: 1/26/2017 8:33:22 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1672.5	5112.7	37634.	3411.7
Stddev	3.2	3.5	122.	8.0
%RSD	.19167	.06799	.32326	.23587
#1	1674.3	5114.8	37769.	3402.4
#2	1674.3	5114.7	37535.	3417.3
#3	1668.8	5108.7	37596.	3415.2

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 1/26/2017 8:39:29 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9126	492.4	1.099	.5023	.4930	468.2	.9352	.4703	.4980	.5253
Stddev	.0042	1.4	.004	.0001	.0010	7.0	.0002	.0005	.0013	.0023
%RSD	.4626	.2858	.3446	.0206	.2071	1.492	.0234	.1058	.2643	.4322
#1	.9141	491.9	1.096	.5022	.4920	466.3	.9354	.4699	.4976	.5257
#2	.9079	493.9	1.103	.5024	.4941	475.9	.9353	.4708	.4969	.5228
#3	.9159	491.3	1.097	.5024	.4930	462.3	.9350	.4701	.4994	.5273
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	180.8	.0579	490.5	.4901	.9588	.1770	.9378	.9613	1.051	1.028
Stddev	.9	.0299	3.1	.0016	.0007	.0124	.0014	.0020	.001	.005
%RSD	.5154	51.66	.6328	.3333	.0707	6.991	.1451	.2085	.1338	.4855
#1	180.5	.0917	489.6	.4888	.9595	.1872	.9378	.9636	1.050	1.024
#2	181.8	.0471	494.0	.4896	.9589	.1632	.9392	.9597	1.051	1.026
#3	180.0	.0349	488.0	.4919	.9581	.1806	.9365	.9607	1.053	1.034
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1220	.9470	1.022	1.026	.9882	.4671	.9358
Stddev	.0009	.0017	.002	.006	.0040	.0008	.0008
%RSD	.7293	.1783	.1674	.5679	.4060	.1701	.0874
#1	.1231	.9456	1.020	1.023	.9906	.4663	.9366
#2	.1214	.9489	1.023	1.022	.9835	.4671	.9350
#3	.1217	.9465	1.023	1.032	.9903	.4679	.9357
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 1/26/2017 8:39:29 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1658.6	5096.0	37696.	3408.9
Stddev	4.4	3.4	125.	47.6
%RSD	.26532	.06729	.33249	1.3968
#1	1653.7	5093.7	37810.	3410.8
#2	1662.2	5094.3	37716.	3360.3
#3	1660.1	5099.9	37562.	3455.5

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/26/2017 8:51:43 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2591	40.72	2.049	2.054	2.036	40.84	2.061	2.055	2.048	2.020
Stddev	.0008	.03	.004	.005	.006	.05	.003	.003	.002	.002
%RSD	.3013	.0710	.1780	.2269	.2734	.1177	.1386	.1272	.1166	.1189
#1	.2593	40.72	2.046	2.052	2.037	40.84	2.058	2.052	2.046	2.020
#2	.2598	40.69	2.048	2.050	2.029	40.79	2.062	2.056	2.049	2.018
#3	.2583	40.75	2.053	2.059	2.040	40.88	2.064	2.057	2.050	2.023
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.98	41.23	40.83	2.067	2.094	40.85	2.063	2.023	2.037	2.047
Stddev	.09	.10	.10	.007	.007	.11	.004	.005	.001	.006
%RSD	.2098	.2370	.2530	.3452	.3391	.2615	.1673	.2433	.0537	.2828
#1	40.99	41.15	40.92	2.064	2.086	40.84	2.063	2.017	2.035	2.047
#2	40.89	41.20	40.72	2.062	2.099	40.75	2.060	2.025	2.037	2.041
#3	41.06	41.34	40.85	2.075	2.098	40.96	2.067	2.026	2.037	2.053
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.221	2.104	2.087	2.107	2.038	2.093	2.057
Stddev	.006	.003	.006	.001	.006	.001	.004
%RSD	.2737	.1170	.2823	.0579	.3112	.0446	.2120
#1	2.214	2.103	2.086	2.106	2.030	2.092	2.052
#2	2.225	2.101	2.082	2.108	2.042	2.094	2.059
#3	2.225	2.106	2.094	2.106	2.041	2.092	2.060
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/26/2017 8:51:43 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1880.2	5427.4	41130.	3479.2
Stddev	3.7	8.2	70.	14.3
%RSD	.19929	.15050	.16966	.41214
#1	1883.9	5436.5	41181.	3463.4
#2	1876.4	5420.6	41050.	3482.5
#3	1880.5	5425.1	41158.	3491.5

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/26/2017 8:59:34 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0042	-.0012	-.0001	.0000	.0042	.0000	.0000	.0002	.0001
Stddev	.0002	.0031	.0005	.0003	.000	.0009	.000	.000	.0003	.0002
%RSD	68.48	74.12	42.37	457.4	3095.	20.36	107.2	195.0	144.7	330.9
#1	-.0001	.0006	-.0018	.0003	.0000	.0051	.0000	.0000	.0002	-.0002
#2	-.0004	.0060	-.0009	-.0003	.0000	.0034	-.0001	.0000	.0004	.0002
#3	-.0003	.0060	-.0009	-.0002	.0000	.0041	.0000	-.0001	-.0001	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0016	.0209	-.0254	.0000	.0000	.0027	-.0001	.0003	-.0001	.0002
Stddev	.0005	.0432	.0181	.0000	.0001	.0098	.0001	.0007	.0013	.0016
%RSD	30.31	206.4	71.17	79.05	350.5	371.2	202.1	289.9	1145.	809.4
#1	-.0011	.0483	-.0156	.0000	.0001	.0128	.0000	.0008	.0003	.0001
#2	-.0017	.0433	-.0463	.0001	-.0001	.0021	-.0002	.0005	-.0016	-.0014
#3	-.0021	-.0289	-.0144	.0000	.0001	-.0069	.0000	-.0006	.0009	.0019
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0002	.0000	.0001	.0003	.0000	.0000
Stddev	.0007	.0001	.0001	.0001	.0012	.000	.000
%RSD	309.8	64.62	127.8	92.42	400.2	556.7	108.8
#1	.0000	.0002	.0000	.0000	.0013	-.0002	.0000
#2	.0011	.0001	.0001	.0002	-.0011	.0001	-.0001
#3	-.0004	.0003	.0000	.0001	.0007	.0000	.0000
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/26/2017 8:59:34 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2077.2	5638.4	42440.	3507.3
Stddev	.7	9.9	47.	12.3
%RSD	.03507	.17600	.10977	.34998
#1	2077.9	5649.5	42405.	3515.9
#2	2077.3	5635.4	42422.	3512.7
#3	2076.5	5630.4	42493.	3493.2

Zoom In Zoom Out

Sample Name: FA40575-4 Acquired: 1/26/2017 9:03:56 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.0405	.0131	.0125	-.0001	63.44	-.0001	-.0001	.0008	.0000
Stddev	.0003	.0094	.0004	.0001	.0000	.03	.0001	.0002	.0001	.000
%RSD	17870.	23.12	2.878	.9574	80.37	.0428	43.35	122.1	14.51	1191.
#1	.0002	.0453	.0127	.0124	.0000	63.41	-.0001	.0000	.0009	-.0004
#2	.0001	.0465	.0134	.0126	-.0001	63.47	-.0001	-.0001	.0007	.0002
#3	-.0004	.0297	.0133	.0127	-.0001	63.45	-.0002	-.0003	.0008	.0002

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	2.237	1.962	4.096	.0271	.0711	17.79	-.0002	-.0005	-.0002	.0003
Stddev	.004	.028	.018	.0001	.0003	.04	.0001	.0005	.0010	.0010
%RSD	.1617	1.408	.4318	.3434	.3675	.2088	57.80	84.15	596.0	335.3
#1	2.238	1.946	4.116	.0270	.0712	17.75	-.0003	-.0001	.0004	-.0006
#2	2.241	1.994	4.081	.0272	.0708	17.81	-.0001	-.0006	.0004	.0000
#3	2.234	1.945	4.091	.0272	.0712	17.81	-.0001	-.0010	-.0013	.0015

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.932	-.0001	.6245	.0006	-.0002	-.0004	.0688
Stddev	.003	.0002	.0017	.0001	.0003	.0002	.0001
%RSD	.0735	122.5	.2671	14.41	137.9	38.08	.2089
#1	3.933	.0000	.6227	.0005	-.0003	-.0006	.0688
#2	3.935	.0000	.6260	.0006	-.0005	-.0003	.0686
#3	3.929	-.0003	.6248	.0007	.0001	-.0003	.0689

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2007.3	5543.8	42198.	3529.7
Stddev	5.2	3.3	120.	4.7
%RSD	.25958	.05887	.28536	.13408
#1	2002.0	5545.0	42307.	3524.6
#2	2012.4	5546.2	42219.	3530.8
#3	2007.5	5540.1	42069.	3533.9

Zoom In Zoom Out

Sample Name: FA40575-5 Acquired: 1/26/2017 9:08:02 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 4.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0007	.0280	-.0039	.0103	.0002	32.63	-.0002	-.0002	.0012	-.0006
Stddev	.0008	.0537	.0007	.0004	.0003	.05	.0000	.0003	.0002	.0007
%RSD	113.3	192.1	17.50	4.201	115.9	.1523	12.44	132.0	14.73	123.7
#1	-.0014	.0300	-.0033	.0108	-.0001	32.68	-.0002	-.0003	.0011	.0000
#2	-.0007	-.0267	-.0038	.0101	.0005	32.59	-.0002	-.0005	.0011	-.0003
#3	.0001	.0806	-.0046	.0100	.0003	32.61	-.0002	.0001	.0014	-.0013

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	1.140	1.518	3.958	.0429	.0209	158.2	-.0007	-.0007	.0007	.0039
Stddev	.005	.162	.026	.0002	.0002	.3	.0004	.0024	.0040	.0028
%RSD	.4585	10.70	.6584	.4593	1.072	.2014	53.64	347.0	561.6	71.68
#1	1.142	1.617	3.928	.0429	.0209	158.5	-.0012	.0019	-.0004	.0071
#2	1.143	1.330	3.973	.0431	.0211	158.0	-.0004	-.0013	.0052	.0017
#3	1.134	1.606	3.973	.0427	.0207	158.0	-.0007	-.0027	-.0026	.0029

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	6.414	-.0016	.4687	.0002	-.0017	-.0004	.0435
Stddev	.006	.0006	.0018	.0003	.0041	.0013	.0003
%RSD	.0940	35.57	.3901	151.4	235.4	304.7	.7267
#1	6.408	-.0013	.4707	.0001	.0028	-.0010	.0434
#2	6.413	-.0022	.4681	.0000	-.0027	.0011	.0432
#3	6.420	-.0012	.4672	.0005	-.0053	-.0014	.0438

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2033.8	5610.8	42534.	3565.4
Stddev	.8	12.1	190.	13.2
%RSD	.03839	.21636	.44578	.37069
#1	2034.6	5618.3	42576.	3577.9
#2	2033.6	5617.4	42700.	3566.8
#3	2033.1	5596.8	42327.	3551.6

Zoom In Zoom Out

Sample Name: FA40575-6 Acquired: 1/26/2017 9:12:12 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0002	.1194	-.0006	.0111	.0000	40.81	-.0001	-.0001	.0015	-.0002
Stddev	.0003	.0052	.0004	.0003	.000	.08	.0001	.0000	.0005	.0002
%RSD	168.3	4.386	73.90	2.561	461.0	.1983	54.30	25.82	33.08	116.9
#1	.0004	.1137	-.0001	.0114	.0001	40.91	-.0002	-.0002	.0014	.0000
#2	-.0001	.1204	-.0008	.0108	-.0001	40.76	-.0001	-.0001	.0010	-.0003
#3	.0001	.1241	-.0009	.0112	.0000	40.77	-.0001	-.0001	.0020	-.0002

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0718	1.085	1.562	.0143	.0025	40.46	-.0001	-.0004	-.0004	.0004
Stddev	.0032	.031	.005	.0001	.0001	.07	.0002	.0008	.0003	.0019
%RSD	4.408	2.830	.3096	.6808	2.231	.1669	156.6	193.3	70.98	509.8
#1	.0712	1.051	1.557	.0144	.0025	40.53	-.0002	-.0002	-.0005	-.0018
#2	.0753	1.110	1.562	.0144	.0025	40.40	-.0002	.0003	-.0007	.0010
#3	.0691	1.095	1.567	.0142	.0026	40.47	.0001	-.0012	-.0001	.0019

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.937	-.0001	.2666	.0020	-.0003	.0013	.0637
Stddev	.004	.0001	.0005	.0001	.0002	.0002	.0001
%RSD	.1307	155.2	.1834	7.396	56.43	16.25	.1747
#1	2.937	.0000	.2672	.0019	-.0001	.0014	.0636
#2	2.933	-.0002	.2664	.0020	-.0003	.0011	.0638
#3	2.941	.0000	.2663	.0022	-.0005	.0014	.0637

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1993.0	5557.6	42061.	3541.2
Stddev	5.0	4.6	204.	38.6
%RSD	.25254	.08250	.48464	1.0908
#1	1992.9	5552.8	41927.	3507.8
#2	1998.1	5558.1	42296.	3583.5
#3	1988.0	5561.9	41960.	3532.4

Zoom In Zoom Out

Sample Name: FA40575-7 Acquired: 1/26/2017 9:16:21 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	.0235	.0021	.0141	.0000	72.86	-.0001	-.0002	.0011	.0000
Stddev	.0003	.0103	.0004	.0002	.0001	.22	.0000	.0000	.0002	.000
%RSD	220.7	43.63	17.66	1.194	3565.	.3029	14.73	28.63	22.35	1625.
#1	-.0002	.0354	.0025	.0139	.0000	72.92	-.0001	-.0002	.0010	-.0003
#2	.0001	.0183	.0019	.0141	.0001	73.05	-.0002	-.0001	.0008	-.0002
#3	.0005	.0169	.0019	.0143	-.0001	72.62	-.0001	-.0001	.0013	.0004

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	2.548	1.093	2.579	.0403	.0042	24.09	-.0002	-.0009	-.0005	.0023
Stddev	.012	.003	.035	.0003	.0001	.07	.0002	.0005	.0009	.0007
%RSD	.4573	.3001	1.360	.7263	1.200	.2908	110.6	52.59	181.8	32.02
#1	2.560	1.090	2.565	.0405	.0043	24.10	-.0001	-.0004	-.0015	.0025
#2	2.548	1.096	2.619	.0404	.0042	24.15	-.0004	-.0013	.0001	.0015
#3	2.536	1.095	2.554	.0400	.0042	24.01	.0000	-.0011	-.0001	.0029

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.395	-.0004	.5264	.0007	-.0001	.0004	.0007
Stddev	.011	.0000	.0012	.0001	.0003	.0001	.0000
%RSD	.3295	2.804	.2211	17.59	219.3	19.31	6.115
#1	3.407	-.0003	.5269	.0007	.0002	.0004	.0006
#2	3.385	-.0004	.5273	.0006	-.0003	.0003	.0007
#3	3.393	-.0004	.5251	.0009	-.0003	.0005	.0006

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1993.3	5554.5	41978.	3517.5
Stddev	8.2	16.8	129.	32.7
%RSD	.41378	.30231	.30774	.92937
#1	1986.9	5538.2	42023.	3508.2
#2	1990.4	5553.6	41833.	3490.5
#3	2002.6	5571.7	42079.	3553.9

Zoom In Zoom Out

Sample Name: FA40575-3 Acquired: 1/26/2017 9:20:29 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	.0191	-.0026	.0069	.0000	34.15	-.0002	-.0003	.0015	.0004
Stddev	.0002	.0107	.0007	.0001	.0001	.10	.0001	.0002	.0000	.0002
%RSD	141.5	55.91	28.16	1.374	305.5	.3032	31.82	65.62	3.158	52.82
#1	-.0003	.0249	-.0018	.0068	-.0001	34.14	-.0002	-.0002	.0016	.0003
#2	.0001	.0068	-.0032	.0069	.0000	34.26	-.0002	-.0002	.0015	.0006
#3	-.0001	.0257	-.0028	.0070	.0001	34.06	-.0003	-.0005	.0016	.0002

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.6384	1.135	4.076	.0199	.0077	141.0	-.0003	-.0013	-.0011	.0015
Stddev	.0012	.058	.059	.0000	.0002	.5	.0006	.0008	.0014	.0045
%RSD	.1910	5.061	1.444	.2351	2.688	.3243	160.1	60.93	136.0	295.3
#1	.6398	1.071	4.124	.0199	.0080	141.1	-.0006	-.0019	-.0013	.0054
#2	.6375	1.181	4.093	.0199	.0076	141.4	.0003	-.0016	.0005	-.0034
#3	.6380	1.154	4.010	.0199	.0076	140.5	-.0007	-.0004	-.0024	.0025

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	4.369	-.0005	.3891	.0006	-.0008	-.0006	.0828
Stddev	.001	.0003	.0011	.0001	.0015	.0004	.0001
%RSD	.0176	54.43	.2895	16.98	190.2	61.25	.1580
#1	4.369	-.0008	.3886	.0006	.0005	-.0008	.0827
#2	4.369	-.0004	.3904	.0007	-.0004	-.0009	.0826
#3	4.368	-.0003	.3883	.0005	-.0025	-.0002	.0829

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1983.0	5545.5	41948.	3527.4
Stddev	3.6	13.6	120.	24.2
%RSD	.18050	.24567	.28647	.68622
#1	1986.7	5561.2	41944.	3526.9
#2	1982.8	5538.3	41830.	3503.5
#3	1979.5	5536.9	42071.	3551.9

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/26/2017 9:24:38 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2685	42.26	2.068	2.108	2.126	42.38	2.110	2.107	2.127
Stddev	.0019	.14	.005	.014	.006	.12	.006	.006	.004
%RSD	.7082	.3322	.2427	.6667	.3006	.2763	.2768	.2874	.1862
#1	.2664	42.23	2.074	2.118	2.128	42.47	2.116	2.113	2.123
#2	.2700	42.13	2.067	2.092	2.119	42.25	2.108	2.106	2.131
#3	.2692	42.40	2.064	2.115	2.131	42.43	2.104	2.101	2.128
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.123	43.08	42.04	42.07	2.163	2.161	42.38	2.095	2.090
Stddev	.003	.03	.18	.03	.005	.004	.09	.006	.007
%RSD	.1329	.0807	.4318	.0620	.2532	.1932	.2206	.3061	.3200
#1	2.120	43.10	42.10	42.10	2.164	2.166	42.40	2.102	2.095
#2	2.125	43.04	41.83	42.07	2.157	2.159	42.27	2.092	2.091
#3	2.125	43.10	42.18	42.05	2.168	2.159	42.45	2.090	2.082
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.103	2.071	2.297	2.141	2.178	F2.222	2.111	2.161	2.112
Stddev	.009	.004	.004	.008	.008	.008	.006	.006	.008
%RSD	.4459	.1950	.1936	.3612	.3499	.3556	.2693	.2800	.3582
#1	2.113	2.076	2.302	2.150	2.180	2.213	2.115	2.154	2.120
#2	2.103	2.068	2.296	2.137	2.170	2.227	2.113	2.165	2.112
#3	2.094	2.070	2.293	2.136	2.184	2.227	2.105	2.163	2.105
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value						2.000			
Range						10.00%			

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/26/2017 9:24:38 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1837.5	5347.3	39859.	3400.4
Stddev	5.1	11.5	160.	25.2
%RSD	.27546	.21517	.40264	.74080
#1	1833.7	5338.1	40043.	3390.8
#2	1835.6	5343.5	39792.	3381.5
#3	1843.3	5360.2	39743.	3429.0

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/26/2017 9:28:34 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	-.0016	-.0007	.0000	.0002	.0047	.0000	.0000	.0003
Stddev	.0002	.0022	.0003	.0002	.0001	.0013	.000	.0001	.0002
%RSD	222.3	138.1	47.01	1247.	73.52	28.41	86.72	174.0	68.16
#1	-.0002	.0009	-.0007	-.0001	.0002	.0040	.0000	.0001	.0001
#2	-.0002	-.0034	-.0004	-.0001	.0002	.0063	.0000	.0001	.0006
#3	.0001	-.0023	-.0011	.0003	.0000	.0040	.0000	.0000	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0032	.0482	-.0153	.0000	F.0010	.0299	-.0001	-.0009
Stddev	.0001	.0040	.0286	.0196	.0000	.0004	.0052	.0001	.0002
%RSD	47.98	124.9	59.21	128.7	142.4	36.44	17.47	140.7	23.15
#1	.0002	.0079	.0701	-.0326	.0000	.0014	.0355	-.0001	-.0008
#2	.0002	.0010	.0159	.0061	.0000	.0011	.0252	-.0003	-.0008
#3	.0001	.0008	.0586	-.0193	.0000	.0006	.0290	.0000	-.0012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0011	.0009	-.0003	.0000	.0003	.0003	-.0001	.0000
Stddev	.0006	.0017	.0005	.0002	.000	.0001	.0004	.0003	.0000
%RSD	398.4	151.3	56.39	83.40	107.1	40.56	134.2	205.9	92.20
#1	.0006	.0031	.0010	.0000	.0000	.0003	.0005	.0002	.0000
#2	-.0005	.0000	.0013	-.0003	.0000	.0002	.0004	-.0002	.0000
#3	-.0005	.0003	.0003	-.0004	-.0001	.0004	-.0001	-.0004	.0000
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/26/2017 9:28:34 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2081.5	5653.8	42409.	3482.4
Stddev	3.7	9.3	179.	24.7
%RSD	.17937	.16473	.42202	.70899
#1	2083.9	5663.0	42378.	3481.6
#2	2077.2	5644.4	42247.	3458.1
#3	2083.4	5653.9	42601.	3507.4

Zoom In Zoom Out

Sample Name: ICV Acquired: 1/26/2017 11:58:39 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2523	40.97	1.991	2.029	2.022	41.35	1.999	1.997	1.990	1.988
Stddev	.0009	.22	.002	.011	.009	.17	.001	.001	.001	.002
%RSD	.3425	.5445	.0830	.5287	.4609	.4076	.0381	.0290	.0647	.1042
#1	.2517	40.74	1.992	2.016	2.011	41.15	1.999	1.996	1.989	1.987
#2	.2533	40.98	1.991	2.036	2.026	41.42	1.998	1.996	1.990	1.990
#3	.2520	41.18	1.989	2.033	2.029	41.46	1.999	1.997	1.991	1.986
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	39.94	40.85	40.99	2.037	1.956	40.84	1.984	2.026	2.001	1.988
Stddev	.10	.19	.09	.005	.003	.12	.003	.002	.006	.007
%RSD	.2616	.4537	.2169	.2390	.1630	.2944	.1571	.0906	.3053	.3623
#1	39.82	40.64	40.89	2.040	1.954	40.70	1.987	2.028	1.998	1.994
#2	39.99	40.95	41.05	2.032	1.955	40.93	1.985	2.025	1.997	1.980
#3	40.02	40.97	41.03	2.040	1.960	40.88	1.981	2.026	2.008	1.989
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1330	2.010	1.952	1.999	2.071	2.093	2.000
Stddev	.0004	.000	.007	.004	.005	.005	.002
%RSD	.2776	.0099	.3671	.2009	.2384	.2346	.1143
#1	.1331	2.009	1.944	1.998	2.071	2.087	2.002
#2	.1333	2.010	1.954	2.003	2.066	2.096	1.997
#3	.1326	2.010	1.957	1.995	2.076	2.094	1.999
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: ICV Acquired: 1/26/2017 11:58:39 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1857.9	5402.6	40532.	3455.1
Stddev	3.7	5.2	119.	31.7
%RSD	.19994	.09596	.29349	.91687
#1	1856.0	5401.9	40481.	3490.3
#2	1862.2	5408.0	40668.	3446.2
#3	1855.5	5397.7	40446.	3428.8

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/26/2017 12:05:30 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2609	41.13	2.001	2.047	2.086	41.35	2.057	2.052	2.074	2.076
Stddev	.0004	.23	.003	.014	.013	.25	.001	.002	.007	.005
%RSD	.1721	.5652	.1555	.6766	.6211	.5981	.0468	.0931	.3417	.2264
#1	.2609	41.21	2.004	2.058	2.089	41.35	2.058	2.052	2.066	2.073
#2	.2605	41.31	2.001	2.053	2.096	41.61	2.058	2.054	2.078	2.081
#3	.2613	40.87	1.998	2.032	2.071	41.11	2.056	2.050	2.078	2.073
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	42.15	40.48	40.71	2.119	2.109	41.32	2.020	2.055	2.062	2.005
Stddev	.26	.18	.27	.004	.002	.25	.002	.003	.004	.002
%RSD	.6211	.4471	.6574	.1980	.0691	.6046	.1032	.1619	.2141	.0887
#1	42.12	40.56	40.65	2.119	2.107	41.37	2.022	2.056	2.057	2.007
#2	42.42	40.60	41.00	2.123	2.110	41.53	2.019	2.052	2.065	2.005
#3	41.90	40.27	40.47	2.115	2.110	41.04	2.018	2.058	2.064	2.004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.254	2.078	2.132	2.174	2.075	2.099	2.069
Stddev	.000	.002	.012	.007	.002	.009	.002
%RSD	.0084	.0706	.5642	.3443	.0995	.4314	.0859
#1	2.254	2.079	2.135	2.166	2.075	2.089	2.069
#2	2.254	2.077	2.143	2.175	2.072	2.103	2.071
#3	2.254	2.077	2.119	2.180	2.077	2.106	2.067
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

SGS ACCUTEST FA40657

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/26/2017 12:05:30 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1854.1	5421.1	40340.	3483.7
Stddev	1.6	4.4	159.	19.6
%RSD	.08524	.08153	.39349	.56173
#1	1852.4	5416.9	40452.	3495.9
#2	1855.5	5420.7	40158.	3461.2
#3	1854.3	5425.7	40410.	3494.1

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/26/2017 12:11:08 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2515	37.72	1.881	1.918	1.943	37.87	1.926	1.919	1.937	1.927
Stddev	.0004	.11	.002	.008	.003	.11	.001	.001	.005	.003
%RSD	.1631	.2823	.0935	.4036	.1530	.2799	.0709	.0566	.2668	.1490
#1	.2512	37.61	1.882	1.911	1.941	37.75	1.925	1.917	1.938	1.930
#2	.2519	37.73	1.879	1.916	1.943	37.93	1.926	1.919	1.941	1.924
#3	.2513	37.82	1.882	1.926	1.946	37.94	1.928	1.920	1.931	1.927
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	38.21	37.38	37.30	1.974	2.002	37.90	1.902	1.924	1.915	1.885
Stddev	.05	.22	.18	.004	.003	.06	.001	.004	.003	.006
%RSD	.1232	.6014	.4900	.2287	.1722	.1689	.0513	.2240	.1517	.3407
#1	38.16	37.26	37.20	1.977	1.998	37.83	1.903	1.922	1.916	1.878
#2	38.21	37.24	37.18	1.977	2.004	37.92	1.901	1.921	1.912	1.891
#3	38.25	37.64	37.51	1.969	2.004	37.96	1.902	1.929	1.918	1.885
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.704	1.998	2.014	2.046	1.940	2.012	1.930
Stddev	.006	.001	.004	.003	.008	.006	.003
%RSD	.2089	.0296	.1844	.1580	.4250	.2935	.1540
#1	2.703	1.998	2.011	2.049	1.931	2.017	1.928
#2	2.711	1.999	2.014	2.043	1.944	2.014	1.930
#3	2.700	1.998	2.018	2.045	1.946	2.005	1.934
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/26/2017 12:11:08 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1868.1	5456.1	40594.	3499.1
Stddev	4.4	3.9	199.	23.0
%RSD	.23639	.07155	.49130	.65750
#1	1872.5	5460.1	40646.	3524.1
#2	1868.3	5455.9	40373.	3478.8
#3	1863.6	5452.3	40762.	3494.4

Zoom In Zoom Out

Sample Name: ICV Acquired: 1/26/2017 12:37:42 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2545	41.63	2.020	2.043	2.042	42.06	2.020	2.016	2.012	2.008
Stddev	.0008	.03	.007	.003	.003	.02	.005	.004	.001	.006
%RSD	.2967	.0753	.3582	.1459	.1214	.0532	.2582	.2241	.0650	.2908
#1	.2546	41.61	2.015	2.040	2.043	42.08	2.016	2.012	2.012	2.010
#2	.2537	41.61	2.016	2.046	2.044	42.03	2.018	2.015	2.011	2.012
#3	.2552	41.66	2.028	2.043	2.039	42.07	2.026	2.021	2.013	2.001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.88	41.51	41.77	2.049	1.960	41.50	2.015	2.044	2.013	2.022
Stddev	.03	.07	.03	.006	.005	.06	.006	.004	.008	.005
%RSD	.0675	.1696	.0727	.2968	.2702	.1406	.2877	.1799	.4181	.2398
#1	40.91	41.43	41.80	2.055	1.955	41.56	2.012	2.045	2.005	2.019
#2	40.88	41.52	41.74	2.050	1.960	41.44	2.011	2.040	2.011	2.019
#3	40.86	41.57	41.78	2.043	1.965	41.50	2.022	2.047	2.022	2.027
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1196	2.023	1.963	2.021	2.084	2.105	2.018
Stddev	.0003	.004	.001	.003	.004	.003	.003
%RSD	.2256	.2018	.0288	.1662	.2010	.1322	.1664
#1	.1193	2.019	1.962	2.018	2.083	2.105	2.015
#2	.1196	2.021	1.963	2.021	2.080	2.102	2.019
#3	.1198	2.027	1.963	2.024	2.088	2.108	2.022
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

SGS ACCUTEST FA40657

Zoom In Zoom Out

Sample Name: ICV Acquired: 1/26/2017 12:37:42 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1862.3	5405.1	40626.	3441.9
Stddev	5.1	19.0	30.	10.8
%RSD	.27327	.35185	.07275	.31381
#1	1863.4	5419.3	40660.	3430.1
#2	1866.8	5412.6	40608.	3451.3
#3	1856.8	5383.5	40609.	3444.3

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/26/2017 12:43:03 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2536	38.51	1.954	1.961	1.962	38.76	1.971	1.962	1.967	1.937
Stddev	.0001	.11	.004	.004	.004	.07	.003	.002	.002	.006
%RSD	.0508	.2824	.1999	.1823	.1964	.1913	.1359	.0822	.1074	.2935
#1	.2536	38.58	1.956	1.964	1.964	38.80	1.973	1.964	1.965	1.943
#2	.2534	38.38	1.950	1.957	1.958	38.67	1.968	1.961	1.969	1.934
#3	.2537	38.57	1.958	1.962	1.965	38.81	1.972	1.962	1.968	1.933
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	38.82	38.61	38.77	1.994	2.022	38.65	1.972	1.941	1.939	1.956
Stddev	.16	.12	.07	.004	.003	.14	.002	.002	.003	.004
%RSD	.4055	.3031	.1733	.1769	.1444	.3503	.0994	.1165	.1531	.2240
#1	38.92	38.67	38.81	1.996	2.021	38.75	1.974	1.944	1.941	1.961
#2	38.64	38.47	38.69	1.990	2.019	38.49	1.970	1.939	1.936	1.954
#3	38.91	38.68	38.80	1.996	2.025	38.71	1.971	1.941	1.940	1.953
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.504	2.047	2.023	2.047	1.955	2.038	1.969
Stddev	.004	.003	.003	.004	.005	.004	.003
%RSD	.1412	.1647	.1398	.1835	.2771	.1895	.1578
#1	2.500	2.051	2.023	2.050	1.959	2.036	1.972
#2	2.504	2.045	2.020	2.048	1.949	2.043	1.966
#3	2.507	2.045	2.026	2.043	1.956	2.036	1.969
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/26/2017 12:43:03 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1875.4	5415.0	40648.	3458.4
Stddev	2.9	12.0	88.	28.7
%RSD	.15571	.22096	.21651	.83027
#1	1872.4	5401.2	40722.	3435.8
#2	1878.2	5422.4	40550.	3490.7
#3	1875.7	5421.4	40670.	3448.6

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/26/2017 12:50:46 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	-.0105	.0002	.0002	-.0001	-.0022	.0000	-.0001	.0002	.0002
Stddev	.0001	.0106	.0006	.0004	.0001	.0020	.000	.0001	.0002	.0001
%RSD	29.63	101.1	404.5	195.4	196.1	90.47	117.4	76.73	126.1	88.81
#1	.0004	-.0227	-.0004	.0007	.0001	.0000	.0000	-.0001	.0000	.0002
#2	.0002	-.0029	.0000	.0000	-.0002	-.0038	-.0001	-.0001	.0001	.0000
#3	.0004	-.0060	.0009	.0000	-.0001	-.0028	.0000	-.0002	.0004	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0009	-.0163	-.0021	.0000	-.0006	.0050	-.0001	.0003	.0008	.0003
Stddev	.0032	.0222	.0126	.000	.0000	.0026	.0002	.0007	.0010	.0010
%RSD	357.7	136.0	601.0	104.5	4.360	50.84	343.5	242.3	124.6	301.6
#1	.0039	-.0003	.0009	.0000	-.0006	.0050	-.0002	-.0003	.0000	.0003
#2	.0013	-.0070	.0087	.0000	-.0006	.0076	.0002	.0011	.0005	.0013
#3	-.0025	-.0416	-.0159	.0000	-.0006	.0025	-.0001	.0001	.0019	-.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008	.0000	.0000	-.0002	.0003	.0001	.0001
Stddev	.0001	.0002	.000	.0001	.0010	.0000	.0001
%RSD	15.76	909.9	106.6	62.67	378.2	11.48	72.37
#1	.0007	.0001	.0000	-.0001	.0001	.0001	.0000
#2	.0009	-.0002	.0000	-.0002	.0014	.0001	.0001
#3	.0007	.0002	.0000	-.0003	-.0007	.0001	.0001
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/26/2017 12:50:46 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2064.9	5624.7	41985.	3498.6
Stddev	1.5	3.1	281.	4.4
%RSD	.07239	.05456	.66851	.12517
#1	2066.1	5621.3	41672.	3503.5
#2	2065.3	5625.4	42215.	3497.1
#3	2063.2	5627.3	42067.	3495.1

Zoom In Zoom Out

Sample Name: MP31551-MB1 Acquired: 1/26/2017 12:55:34 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	-.0054	-.0006	.0002	-.0001	.0038	-.0001	-.0002	.0003
Stddev	.0007	.0035	.0002	.0001	.0001	.0050	.0000	.0001	.0002
%RSD	832.4	64.75	37.44	51.46	107.9	129.3	64.51	56.82	59.58
#1	.0000	-.0089	-.0009	.0002	-.0003	.0000	-.0001	-.0001	.0004
#2	.0006	-.0055	-.0005	.0001	.0000	.0094	.0000	-.0003	.0001
#3	-.0008	-.0019	-.0005	.0001	.0000	.0020	-.0001	-.0002	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	-.0032	-.0342	.0046	.0000	-.0008	.0072	-.0001	.0001
Stddev	.0001	.0025	.0101	.0129	.000	.0001	.0030	.0002	.0007
%RSD	44.91	78.13	29.51	282.5	30.84	6.345	42.09	267.1	588.7
#1	-.0002	-.0052	-.0279	-.0080	.0000	-.0009	.0055	.0001	-.0002
#2	-.0002	-.0040	-.0458	.0177	.0000	-.0008	.0107	-.0002	.0009
#3	-.0004	-.0004	-.0288	.0040	.0000	-.0008	.0054	-.0001	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F.0027	.0009	.0038	.0000	.0000	-.0003	-.0008	-.0001	.0014
Stddev	.0004	.0032	.0004	.0003	.0001	.0001	.0006	.0002	.0000
%RSD	15.41	339.6	11.38	1005.	468.3	58.26	77.32	127.0	3.371
#1	.0028	-.0024	.0043	-.0001	-.0001	-.0004	-.0007	.0000	.0014
#2	.0030	.0013	.0035	-.0002	.0001	-.0003	-.0002	-.0003	.0014
#3	.0022	.0040	.0037	.0004	.0001	-.0001	-.0014	-.0001	.0013
Check ?	Chk Fail	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.0025								
Low Limit	-.0025								

Zoom In Zoom Out

Sample Name: MP31551-MB1 Acquired: 1/26/2017 12:55:34 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2080.8	5650.0	42573.	3539.7
Stddev	2.7	10.5	103.	6.1
%RSD	.12792	.18499	.24130	.17137
#1	2083.8	5649.7	42463.	3533.0
#2	2079.7	5660.6	42667.	3541.2
#3	2078.8	5639.7	42590.	3544.9

Zoom In Zoom Out

Sample Name: MP31551-B1 Acquired: 1/26/2017 12:59:49 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0491	30.16	2.084	2.154	.0546	28.49	.0526	.5245	.2141	.2671
Stddev	.0014	.08	.003	.009	.0002	.10	.0001	.0002	.0015	.0003
%RSD	2.789	.2792	.1569	.4378	.4477	.3342	.1925	.0409	.6794	.1089
#1	.0481	30.22	2.080	2.162	.0549	28.48	.0526	.5245	.2133	.2673
#2	.0486	30.19	2.084	2.157	.0547	28.59	.0525	.5243	.2132	.2667
#3	.0507	30.06	2.087	2.143	.0544	28.40	.0527	.5247	.2158	.2672
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	29.71	27.91	27.79	.5416	.5603	27.96	.5305	.5158	.5302	2.069
Stddev	.04	.09	.14	.0025	.0010	.11	.0006	.0009	.0011	.005
%RSD	.1339	.3265	.4911	.4623	.1771	.3835	.1070	.1671	.2147	.2404
#1	29.72	27.94	27.63	.5421	.5592	27.99	.5309	.5156	.5304	2.074
#2	29.74	27.98	27.86	.5389	.5606	28.05	.5307	.5151	.5290	2.066
#3	29.66	27.81	27.87	.5439	.5612	27.84	.5298	.5168	.5313	2.066
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0602	.5632	.5638	.5687	2.075	.5087	.5282
Stddev	.0006	.0004	.0018	.0052	.002	.0025	.0004
%RSD	.9398	.0778	.3132	.9139	.1037	.4987	.0728
#1	.0603	.5636	.5657	.5643	2.076	.5071	.5278
#2	.0607	.5628	.5637	.5673	2.076	.5073	.5283
#3	.0596	.5633	.5621	.5744	2.072	.5116	.5285
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

SGS ACCUTEST FA40657

Zoom In Zoom Out

Sample Name: MP31551-B1 Acquired: 1/26/2017 12:59:49 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1937.9	5520.2	41563.	3466.3
Stddev	1.1	1.8	107.	25.1
%RSD	.05455	.03249	.25666	.72449
#1	1939.2	5520.3	41560.	3485.5
#2	1937.4	5522.0	41457.	3437.9
#3	1937.3	5518.4	41671.	3475.5

Zoom In Zoom Out

Sample Name: FA40614-8 Acquired: 1/26/2017 13:03:46 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.0310	.0004	.0110	-.0001	32.40	-.0001	-.0001	.0006	-.0001
Stddev	.000	.0130	.0002	.0002	.0001	.08	.0000	.0001	.0002	.0002
%RSD	39640.	41.99	63.16	2.089	83.15	.2418	21.69	111.8	30.08	332.9
#1	-.0002	.0200	.0006	.0112	-.0002	32.46	-.0001	.0000	.0005	.0001
#2	.0003	.0454	.0001	.0107	.0000	32.31	-.0001	-.0002	.0008	-.0002
#3	-.0001	.0276	.0004	.0110	-.0001	32.42	-.0001	-.0002	.0005	-.0001

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.3847	.9374	2.381	.0118	.0750	39.40	.0000	-.0003	.0017	.0015
Stddev	.0035	.0439	.037	.0000	.0001	.12	.000	.0006	.0006	.0019
%RSD	.9121	4.688	1.542	.3188	.0946	.2919	1189.	175.5	36.38	127.8
#1	.3867	.9292	2.386	.0118	.0750	39.52	-.0002	-.0009	.0010	.0021
#2	.3868	.8982	2.343	.0119	.0749	39.29	.0000	-.0003	.0019	.0029
#3	.3807	.9849	2.416	.0119	.0750	39.39	.0002	.0002	.0023	-.0006

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.141	.0002	.3313	.0005	.0000	-.0002	.0012
Stddev	.003	.0000	.0017	.0001	.001	.0003	.0000
%RSD	.0860	10.98	.4990	17.54	1931.	195.5	4.096
#1	3.141	.0003	.3327	.0004	.0001	-.0004	.0012
#2	3.139	.0002	.3295	.0006	.0004	.0002	.0012
#3	3.144	.0002	.3317	.0005	-.0006	-.0003	.0012

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1992.6	5525.6	41670.	3514.0
Stddev	4.2	10.8	54.	10.3
%RSD	.20991	.19629	.12861	.29307
#1	1987.8	5513.2	41703.	3525.1
#2	1995.0	5533.0	41700.	3504.7
#3	1995.1	5530.7	41608.	3512.1

Zoom In Zoom Out

Sample Name: MP31551-D1 Acquired: 1/26/2017 13:07:54 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	.0277	.0012	.0110	-.0001	32.23	-.0001	-.0002	.0005	.0000
Stddev	.0005	.0069	.0013	.0002	.0000	.11	.0000	.0000	.0001	.000
%RSD	589.2	24.94	112.3	1.409	18.95	.3351	25.06	24.67	26.40	1267.
#1	-.0003	.0258	.0001	.0111	-.0002	32.31	-.0001	-.0001	.0006	.0003
#2	.0000	.0220	.0027	.0111	-.0001	32.27	-.0001	-.0001	.0004	-.0003
#3	.0006	.0354	.0008	.0108	-.0001	32.10	-.0001	-.0002	.0006	-.0001

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.3695	.9550	2.356	.0117	.0739	39.22	-.0001	-.0003	.0013	.0001
Stddev	.0019	.0161	.016	.0001	.0001	.18	.0001	.0003	.0001	.0006
%RSD	.5205	1.689	.6650	.4509	.1696	.4706	87.69	133.7	7.438	480.2
#1	.3675	.9424	2.367	.0116	.0739	39.39	-.0002	-.0005	.0013	-.0004
#2	.3695	.9493	2.338	.0117	.0737	39.24	-.0001	-.0005	.0015	.0000
#3	.3713	.9732	2.362	.0117	.0740	39.02	.0000	.0001	.0013	.0008

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.108	.0001	.3290	.0003	-.0004	-.0001	.0011
Stddev	.001	.0003	.0019	.0001	.0018	.0004	.0000
%RSD	.0410	347.5	.5703	26.38	419.9	400.3	.9585
#1	3.108	.0002	.3302	.0003	-.0022	-.0002	.0011
#2	3.106	-.0003	.3299	.0004	.0014	-.0004	.0010
#3	3.109	.0004	.3268	.0002	-.0005	.0003	.0011

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1988.3	5517.5	41657.	3504.6
Stddev	3.5	10.1	67.	12.2
%RSD	.17617	.18334	.15992	.34697
#1	1988.0	5521.7	41660.	3513.7
#2	1985.0	5506.0	41589.	3509.4
#3	1992.0	5524.9	41722.	3490.8

Zoom In Zoom Out

Sample Name: MP31551-SD1 Acquired: 1/26/2017 13:12:02 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0017	.0253	.0024	.0123	-.0003	35.09	-.0005	-.0005	.0001	.0014
Stddev	.0011	.0239	.0018	.0011	.0000	.05	.0001	.0003	.0009	.0012
%RSD	65.95	94.37	77.19	8.863	14.59	.1556	29.38	72.09	647.8	89.28
#1	.0008	-.0023	.0006	.0119	-.0004	35.04	-.0006	-.0003	.0002	.0000
#2	.0013	.0394	.0043	.0116	-.0003	35.10	-.0003	-.0002	.0010	.0024
#3	.0029	.0387	.0023	.0136	-.0003	35.14	-.0006	-.0008	-.0008	.0018

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.3798	.8467	2.496	.0122	.0741	42.51	-.0005	.0009	.0016	.0007
Stddev	.0098	.0654	.169	.0002	.0003	.08	.0011	.0012	.0042	.0081
%RSD	2.586	7.729	6.750	1.766	.4694	.1835	221.1	135.6	264.7	1118.
#1	.3726	.8480	2.393	.0121	.0742	42.49	.0005	.0022	-.0028	-.0030
#2	.3910	.7807	2.691	.0121	.0737	42.45	-.0017	.0009	.0020	.0100
#3	.3758	.9115	2.405	.0125	.0743	42.60	-.0004	-.0003	.0055	-.0049

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.348	-.0002	.3543	-.0005	.0014	-.0007	.0430
Stddev	.005	.0011	.0016	.0005	.0072	.0012	.0004
%RSD	.1416	602.8	.4416	87.27	499.5	168.2	.9331
#1	3.349	-.0003	.3557	-.0002	.0085	-.0019	.0435
#2	3.343	.0010	.3526	-.0003	.0017	-.0005	.0426
#3	3.352	-.0012	.3544	-.0010	-.0059	.0003	.0430

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2063.2	5606.6	42168.	3496.7
Stddev	3.2	14.7	102.	8.6
%RSD	.15288	.26157	.24124	.24640
#1	2059.6	5589.9	42052.	3504.1
#2	2065.5	5617.4	42210.	3487.3
#3	2064.4	5612.6	42243.	3498.9

Zoom In Zoom Out

Sample Name: MP31551-PS1 Acquired: 1/26/2017 13:16:11 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0452	2.738	.1105	.2877	.0547	36.83	.0538	.0538	.0555	.1089
Stddev	.0004	.014	.0012	.0005	.0002	.08	.0001	.0002	.0003	.0003
%RSD	.8959	.5233	1.071	.1893	.3938	.2238	.1923	.3166	.5097	.2618
#1	.0456	2.747	.1110	.2883	.0547	36.78	.0538	.0536	.0558	.1086
#2	.0448	2.721	.1091	.2872	.0545	36.78	.0537	.0538	.0554	.1089
#3	.0454	2.745	.1112	.2878	.0549	36.93	.0539	.0539	.0552	.1091

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	3.691	11.55	7.731	.0660	.1809	48.73	.1078	.0512	.1133	.1060
Stddev	.009	.03	.009	.0002	.0002	.04	.0005	.0004	.0014	.0008
%RSD	.2491	.2270	.1105	.2463	.1021	.0922	.4502	.8513	1.270	.7402
#1	3.683	11.57	7.740	.0662	.1807	48.70	.1072	.0507	.1149	.1063
#2	3.691	11.52	7.723	.0661	.1809	48.71	.1082	.0514	.1130	.1051
#3	3.701	11.55	7.729	.0659	.1811	48.78	.1079	.0515	.1121	.1066

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.087	.0519	.3713	.1097	.1037	.0526	.2828
Stddev	.001	.0002	.0005	.0003	.0005	.0002	.0008
%RSD	.0350	.3407	.1407	.3035	.4726	.3734	.2978
#1	3.086	.0519	.3717	.1099	.1041	.0528	.2819
#2	3.088	.0521	.3707	.1100	.1039	.0524	.2831
#3	3.087	.0517	.3715	.1094	.1032	.0527	.2835

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1972.8	5529.6	41688.	3498.8
Stddev	5.4	10.9	141.	26.0
%RSD	.27132	.19748	.33803	.74204
#1	1978.4	5539.2	41528.	3507.5
#2	1972.4	5531.9	41791.	3519.2
#3	1967.7	5517.7	41746.	3469.5

Zoom In Zoom Out

Sample Name: MP31551-S1 Acquired: 1/26/2017 13:20:14 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0489	30.01	2.078	2.142	.0543	59.39	.0519	.5170	.2119	.2664
Stddev	.0005	.20	.006	.019	.0005	.41	.0001	.0008	.0011	.0006
%RSD	.9976	.6697	.2723	.9028	.9197	.6964	.1066	.1533	.5416	.2283
#1	.0487	30.24	2.078	2.164	.0548	59.87	.0518	.5161	.2106	.2671
#2	.0494	29.94	2.073	2.137	.0541	59.14	.0519	.5174	.2127	.2662
#3	.0484	29.85	2.084	2.127	.0539	59.18	.0519	.5175	.2125	.2660

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	29.71	28.92	29.77	.5462	.6266	65.93	.5220	.5153	.5275	2.055
Stddev	.16	.30	.13	.0008	.0016	.47	.0003	.0013	.0015	.010
%RSD	.5526	1.034	.4232	.1549	.2515	.7088	.0495	.2474	.2935	.4911
#1	29.90	29.19	29.91	.5455	.6249	66.47	.5221	.5162	.5258	2.059
#2	29.62	28.97	29.71	.5459	.6270	65.69	.5218	.5158	.5288	2.044
#3	29.61	28.60	29.67	.5471	.6279	65.64	.5223	.5138	.5279	2.063

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.149	.5531	.8747	.5668	2.063	.5063	.5212
Stddev	.007	.0009	.0052	.0014	.003	.0006	.0006
%RSD	.2302	.1609	.5980	.2455	.1636	.1195	.1098
#1	3.141	.5536	.8806	.5652	2.059	.5060	.5207
#2	3.155	.5521	.8730	.5679	2.065	.5070	.5211
#3	3.151	.5536	.8706	.5673	2.064	.5060	.5218

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1890.8	5473.7	40974.	3500.3
Stddev	3.2	7.7	221.	54.3
%RSD	.16826	.14134	.54030	1.5510
#1	1887.9	5465.1	41216.	3438.6
#2	1890.3	5475.9	40925.	3540.8
#3	1894.2	5480.1	40782.	3521.4

Zoom In Zoom Out

Sample Name: MP31551-S2 Acquired: 1/26/2017 13:24:10 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0486	30.44	2.101	2.171	.0550	60.88	.0524	.5216	.2131	.2679
Stddev	.0002	.06	.002	.007	.0005	.16	.0001	.0005	.0002	.0008
%RSD	.3313	.1980	.1118	.3239	.9853	.2565	.1920	.0925	.1139	.2957
#1	.0484	30.41	2.098	2.173	.0550	61.05	.0524	.5211	.2133	.2670
#2	.0488	30.40	2.103	2.164	.0544	60.74	.0524	.5218	.2129	.2685
#3	.0487	30.51	2.102	2.177	.0555	60.87	.0522	.5220	.2129	.2681

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	30.10	29.34	30.06	.5528	.6285	67.47	.5265	.5198	.5313	2.071
Stddev	.04	.07	.04	.0018	.0006	.16	.0005	.0016	.0016	.005
%RSD	.1295	.2354	.1379	.3215	.0902	.2322	.0939	.3138	.3079	.2329
#1	30.11	29.42	30.11	.5524	.6279	67.63	.5263	.5181	.5295	2.074
#2	30.14	29.30	30.04	.5548	.6290	67.32	.5261	.5199	.5318	2.074
#3	30.06	29.29	30.03	.5513	.6285	67.45	.5270	.5213	.5326	2.065

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.243	.5547	.8887	.5609	2.076	.5097	.5263
Stddev	.004	.0002	.0028	.0004	.003	.0010	.0004
%RSD	.1349	.0412	.3162	.0730	.1365	.1908	.0673
#1	3.238	.5547	.8885	.5605	2.073	.5090	.5259
#2	3.247	.5545	.8860	.5612	2.078	.5108	.5265
#3	3.244	.5549	.8916	.5612	2.077	.5093	.5265

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1888.1	5455.3	40962.	3445.8
Stddev	6.4	11.6	66.	10.2
%RSD	.34094	.21179	.16116	.29556
#1	1895.6	5468.6	40946.	3437.5
#2	1884.6	5447.4	40905.	3457.1
#3	1884.3	5450.0	41034.	3442.8

Zoom In Zoom Out

Sample Name: FA40614-1 Acquired: 1/26/2017 13:28:07 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0003	.0031	.0609	.0140	-.0001	83.80	-.0001	-.0002	.0008	-.0001
Stddev	.0004	.0041	.0006	.0001	.0000	.25	.0000	.0001	.0001	.0003
%RSD	155.4	130.6	.9636	.7941	25.96	.2951	21.62	50.00	14.36	219.8
#1	.0004	.0067	.0615	.0140	-.0001	83.95	-.0001	-.0001	.0010	.0000
#2	-.0002	-.0013	.0603	.0141	-.0001	83.52	-.0001	-.0002	.0007	.0000
#3	.0005	.0040	.0608	.0139	-.0001	83.94	-.0001	-.0002	.0008	-.0004

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	3.557	1.307	5.327	.0263	.0014	22.16	-.0001	-.0001	.0001	.0006
Stddev	.011	.022	.025	.0002	.0002	.06	.0001	.0004	.0004	.0028
%RSD	.3128	1.674	.4772	.7251	15.12	.2729	76.27	315.8	404.2	453.3
#1	3.565	1.332	5.346	.0265	.0017	22.18	.0000	.0000	.0002	-.0008
#2	3.545	1.296	5.298	.0261	.0014	22.09	-.0002	-.0006	-.0004	.0039
#3	3.563	1.293	5.337	.0264	.0012	22.20	-.0003	.0002	.0004	-.0012

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.874	-.0001	.6501	.0006	.0004	.0003	.0080
Stddev	.006	.0002	.0023	.0001	.0008	.0002	.0001
%RSD	.1594	190.0	.3502	10.44	204.2	62.48	.8267
#1	3.873	-.0003	.6521	.0007	.0011	.0003	.0081
#2	3.868	-.0002	.6476	.0006	-.0005	.0005	.0080
#3	3.880	.0001	.6506	.0006	.0005	.0001	.0080

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1980.0	5463.7	41574.	3496.7
Stddev	2.5	7.0	302.	38.9
%RSD	.12469	.12823	.72659	1.1115
#1	1982.8	5459.4	41245.	3454.1
#2	1978.1	5471.8	41839.	3530.2
#3	1979.2	5459.9	41638.	3505.8

Zoom In Zoom Out

Sample Name: FA40614-2 Acquired: 1/26/2017 13:32:15 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0004	.0146	.0661	.0141	-.0001	87.92	-.0001	-.0002	.0006	.0001
Stddev	.0004	.0090	.0005	.0002	.0000	.21	.0000	.0001	.0002	.0001
%RSD	104.8	61.56	.7696	1.459	36.19	.2418	29.69	35.35	25.24	94.06
#1	-.0001	.0202	.0667	.0140	-.0001	87.68	-.0001	-.0003	.0005	.0000
#2	.0007	.0042	.0659	.0139	-.0001	88.05	-.0002	-.0002	.0006	.0001
#3	.0006	.0193	.0657	.0143	-.0001	88.04	-.0001	-.0002	.0008	.0002

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	3.272	1.363	5.545	.0249	.0009	21.43	-.0002	-.0001	.0014	.0015
Stddev	.008	.053	.050	.0001	.0001	.06	.0001	.0010	.0012	.0009
%RSD	.2577	3.859	.9062	.2581	14.73	.2723	28.01	1817.	85.83	58.79
#1	3.262	1.421	5.519	.0249	.0007	21.38	-.0003	-.0008	.0024	.0021
#2	3.276	1.319	5.603	.0248	.0009	21.41	-.0001	.0011	.0016	.0018
#3	3.277	1.349	5.513	.0250	.0009	21.50	-.0002	-.0005	.0001	.0005

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.958	.0000	.6808	.0005	-.0002	.0003	.0006
Stddev	.005	.000	.0014	.0001	.0005	.0001	.0000
%RSD	.1371	770.3	.2054	26.20	349.0	37.95	4.472
#1	3.952	-.0002	.6799	.0004	.0001	.0005	.0005
#2	3.960	.0001	.6800	.0007	-.0008	.0002	.0006
#3	3.962	.0000	.6824	.0004	.0002	.0003	.0006

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1973.2	5472.2	41398.	3468.6
Stddev	5.3	3.3	74.	16.1
%RSD	.27052	.05969	.17921	.46491
#1	1979.2	5474.7	41475.	3481.2
#2	1971.4	5468.5	41393.	3450.4
#3	1969.0	5473.3	41326.	3474.2

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/26/2017 13:36:24 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2535	38.70	1.943	1.961	1.973	38.96	1.977	1.968	1.975	1.952
Stddev	.0015	.03	.000	.002	.004	.04	.002	.002	.003	.009
%RSD	.5916	.0875	.0223	.1046	.2246	.1084	.0927	.0872	.1436	.4383
#1	.2550	38.71	1.943	1.963	1.976	38.95	1.976	1.967	1.977	1.951
#2	.2536	38.72	1.943	1.960	1.968	38.93	1.976	1.967	1.976	1.944
#3	.2520	38.66	1.942	1.959	1.975	39.01	1.979	1.970	1.971	1.961
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	39.18	38.56	38.77	2.010	2.030	38.91	1.958	1.965	1.947	1.940
Stddev	.01	.11	.16	.005	.002	.05	.002	.002	.003	.005
%RSD	.0311	.2824	.4134	.2427	.0799	.1374	.0872	.1159	.1667	.2381
#1	39.18	38.49	38.74	2.005	2.029	38.96	1.959	1.963	1.949	1.934
#2	39.19	38.51	38.62	2.015	2.032	38.86	1.957	1.964	1.949	1.942
#3	39.16	38.68	38.94	2.010	2.031	38.91	1.956	1.967	1.943	1.942
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.518	2.046	2.036	2.064	1.974	2.041	1.984
Stddev	.003	.002	.003	.007	.004	.000	.001
%RSD	.1180	.0791	.1272	.3570	.2240	.0209	.0603
#1	2.521	2.044	2.039	2.072	1.972	2.041	1.984
#2	2.516	2.047	2.034	2.057	1.979	2.041	1.983
#3	2.516	2.046	2.037	2.063	1.971	2.041	1.986
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/26/2017 13:36:24 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1867.1	5429.7	40720.	3435.6
Stddev	3.1	8.5	245.	19.0
%RSD	.16619	.15694	.60205	.55249
#1	1870.2	5436.1	40737.	3441.7
#2	1867.1	5432.9	40466.	3450.7
#3	1864.0	5420.0	40955.	3414.3

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/26/2017 13:40:20 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	-.0046	.0005	.0003	.0000	.0016	.0000	-.0001	-.0002	.0002
Stddev	.0003	.0026	.0006	.0001	.0001	.0007	.0000	.0001	.0000	.0001
%RSD	86.46	57.57	125.3	35.45	338.4	40.16	22.76	122.5	4.074	52.25
#1	.0006	-.0026	-.0002	.0002	-.0001	.0024	.0000	-.0001	-.0002	.0001
#2	.0000	-.0036	.0009	.0002	.0001	.0013	.0000	.0000	-.0002	.0002
#3	.0004	-.0076	.0008	.0004	.0000	.0012	.0000	-.0001	-.0002	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0045	.0252	-.0177	.0000	.0004	.0204	.0000	.0000	.0011	.0001
Stddev	.0008	.0150	.0154	.000	.0002	.0082	.0001	.001	.0004	.0005
%RSD	17.11	59.32	86.81	887.6	56.31	40.21	226.2	1588.	37.40	889.6
#1	.0044	.0106	-.0271	.0000	.0006	.0297	-.0001	.0006	.0006	.0006
#2	.0054	.0405	.0000	.0000	.0004	.0173	.0001	-.0001	.0013	-.0005
#3	.0039	.0246	-.0260	.0000	.0002	.0142	.0001	-.0006	.0013	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	.0002	.0001	.0001	.0002	.0000	.0001
Stddev	.0010	.0000	.0001	.0001	.0006	.0001	.0001
%RSD	173.7	9.438	71.33	102.9	265.3	887.8	57.54
#1	.0015	.0002	.0001	.0000	.0000	.0001	.0002
#2	.0008	.0002	.0001	.0002	-.0002	.0000	.0001
#3	-.0005	.0002	.0000	.0000	.0009	-.0001	.0001
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/26/2017 13:40:20 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2070.7	5627.7	42113.	3469.7
Stddev	5.4	2.2	297.	7.0
%RSD	.25923	.03968	.70629	.20203
#1	2064.6	5625.8	42309.	3473.7
#2	2073.4	5627.1	42259.	3461.6
#3	2074.2	5630.1	41771.	3473.7

Zoom In Zoom Out

Sample Name: FA40614-3 Acquired: 1/26/2017 13:44:34 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0002	.0156	.0067	.0119	-.0001	88.55	-.0001	-.0001	.0007	.0002
Stddev	.0001	.0080	.0007	.0004	.0001	.39	.0000	.0001	.0002	.0001
%RSD	53.37	51.27	10.72	3.162	94.93	.4349	8.906	66.32	30.17	77.70
#1	.0001	.0073	.0063	.0123	-.0002	88.53	-.0001	-.0002	.0009	.0001
#2	.0001	.0162	.0075	.0116	-.0001	88.18	-.0001	-.0001	.0008	.0000
#3	.0003	.0233	.0062	.0118	.0000	88.95	-.0001	.0000	.0005	.0003

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	4.238	1.796	3.381	.0421	.0021	12.21	-.0002	-.0002	.0006	.0005
Stddev	.015	.004	.032	.0002	.0001	.03	.0001	.0006	.0016	.0004
%RSD	.3593	.1974	.9341	.4309	6.945	.2568	53.26	331.0	245.4	82.09
#1	4.244	1.799	3.355	.0420	.0022	12.20	-.0002	-.0005	-.0008	.0007
#2	4.221	1.792	3.417	.0420	.0020	12.19	-.0001	-.0005	.0004	.0000
#3	4.250	1.798	3.372	.0423	.0020	12.25	-.0001	.0005	.0023	.0009

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.968	.0000	.5539	.0006	-.0006	.0005	.0014
Stddev	.003	.000	.0017	.0001	.0006	.0000	.0000
%RSD	.1146	881.5	.3093	23.57	113.1	9.136	.6410
#1	2.965	-.0004	.5531	.0006	-.0013	.0006	.0014
#2	2.971	.0002	.5527	.0004	-.0001	.0006	.0014
#3	2.970	.0001	.5559	.0007	-.0003	.0005	.0014

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1990.7	5515.2	41609.	3481.5
Stddev	5.2	14.8	148.	43.0
%RSD	.26272	.26912	.35457	1.2365
#1	1986.3	5512.2	41775.	3467.2
#2	1996.5	5531.3	41557.	3529.9
#3	1989.3	5502.1	41494.	3447.5

Zoom In Zoom Out

Sample Name: FA40614-4 Acquired: 1/26/2017 13:48:46 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0003	.0096	-.0006	.0130	-.0001	63.83	-.0001	-.0002	.0005	-.0001
Stddev	.0005	.0072	.0010	.0005	.0000	.13	.0000	.0001	.0000	.0003
%RSD	164.5	74.68	178.2	3.483	10.62	.2085	37.80	29.89	2.841	297.3
#1	-.0003	.0148	.0002	.0125	-.0001	63.82	-.0001	-.0002	.0005	-.0005
#2	.0006	.0125	-.0017	.0134	-.0001	63.70	-.0001	-.0001	.0005	.0001
#3	.0006	.0014	-.0001	.0131	-.0001	63.96	-.0001	-.0002	.0005	.0000

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	1.395	1.892	1.998	.0380	.0062	27.84	.0002	-.0009	.0009	.0008
Stddev	.006	.019	.022	.0003	.0001	.05	.0003	.0009	.0005	.0012
%RSD	.4242	.9808	1.089	.6893	1.884	.1943	121.4	102.2	53.87	158.7
#1	1.394	1.901	1.986	.0380	.0061	27.84	.0002	-.0020	.0014	-.0003
#2	1.390	1.904	1.985	.0383	.0063	27.79	.0006	-.0005	.0007	.0006
#3	1.402	1.871	2.024	.0378	.0062	27.89	.0000	-.0002	.0005	.0021

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.766	-.0001	.4504	.0005	.0002	.0004	.0057
Stddev	.012	.0001	.0012	.0001	.0011	.0001	.0000
%RSD	.4326	119.8	.2603	22.05	499.0	27.59	.5295
#1	2.758	.0000	.4504	.0006	.0013	.0005	.0057
#2	2.761	.0000	.4492	.0005	.0002	.0003	.0057
#3	2.780	-.0002	.4515	.0004	-.0008	.0005	.0058

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1991.6	5520.5	41642.	3515.0
Stddev	5.1	12.0	55.	4.9
%RSD	.25859	.21773	.13263	.13814
#1	1997.5	5533.6	41603.	3517.4
#2	1989.0	5517.8	41616.	3518.2
#3	1988.2	5510.0	41705.	3509.4

Zoom In Zoom Out

Sample Name: FA40614-5 Acquired: 1/26/2017 13:52:55 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0006	.0031	.0021	.0135	.0000	68.26	-.0001	-.0002	.0009	.0003
Stddev	.0002	.0039	.0005	.0001	.0000	.07	.0001	.0001	.0002	.0002
%RSD	41.91	125.5	23.88	1.060	234.0	.1016	52.85	48.80	21.45	77.15
#1	.0004	.0027	.0027	.0133	.0000	68.18	-.0001	-.0001	.0011	.0000
#2	.0005	-.0006	.0017	.0135	.0000	68.31	-.0002	-.0002	.0008	.0004
#3	.0009	.0072	.0020	.0136	.0001	68.29	-.0001	-.0001	.0009	.0005

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	1.873	1.180	2.563	.0470	.0074	28.34	.0000	-.0003	.0011	.0005
Stddev	.004	.025	.017	.0003	.0000	.06	.0002	.0002	.0001	.0009
%RSD	.2343	2.081	.6704	.6915	.2666	.2012	386.8	55.04	10.22	186.6
#1	1.878	1.179	2.561	.0473	.0074	28.28	.0000	-.0002	.0012	-.0004
#2	1.870	1.204	2.548	.0468	.0074	28.35	.0002	-.0002	.0010	.0004
#3	1.870	1.155	2.582	.0468	.0074	28.39	-.0001	-.0005	.0012	.0014

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.261	.0000	.4707	.0005	-.0005	.0009	.0344
Stddev	.004	.000	.0013	.0001	.0013	.0002	.0002
%RSD	.1205	330.0	.2817	10.61	243.6	22.77	.5780
#1	3.257	.0001	.4695	.0005	.0001	.0007	.0341
#2	3.265	.0000	.4705	.0006	-.0020	.0011	.0345
#3	3.261	-.0002	.4722	.0005	.0003	.0009	.0345

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1993.2	5512.7	41844.	3489.1
Stddev	2.2	12.3	84.	9.0
%RSD	.11198	.22323	.20168	.25885
#1	1995.3	5520.1	41938.	3490.9
#2	1990.9	5498.5	41820.	3497.1
#3	1993.6	5519.5	41775.	3479.3

Zoom In Zoom Out

Sample Name: FA40614-6 Acquired: 1/26/2017 13:57:05 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0002	.0206	-.0006	.0164	-.0001	58.08	-.0001	-.0001	.0008	-.0001
Stddev	.0001	.0142	.0006	.0004	.0001	.16	.0000	.0001	.0001	.0003
%RSD	62.57	69.14	101.0	2.684	75.05	.2673	10.50	125.3	8.439	183.4
#1	.0004	.0350	-.0013	.0160	-.0002	57.94	-.0001	-.0001	.0008	.0000
#2	.0001	.0066	-.0005	.0168	-.0001	58.25	-.0001	.0000	.0009	.0001
#3	.0002	.0201	-.0001	.0166	.0000	58.07	-.0001	-.0002	.0008	-.0004

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	2.426	1.005	5.527	.0383	.0196	52.08	-.0002	-.0006	.0002	-.0011
Stddev	.017	.017	.028	.0002	.0002	.13	.0001	.0004	.0008	.0014
%RSD	.7119	1.673	.5064	.4063	.8390	.2471	56.87	62.85	434.4	127.2
#1	2.413	.9862	5.502	.0382	.0198	52.03	-.0001	-.0003	-.0007	.0005
#2	2.446	1.014	5.557	.0383	.0195	52.23	-.0003	-.0005	.0008	-.0019
#3	2.419	1.017	5.522	.0385	.0196	51.99	-.0001	-.0010	.0005	-.0020

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	4.339	.0000	.6177	.0007	-.0006	.0003	.0086
Stddev	.004	.0003	.0030	.0001	.0004	.0001	.0001
%RSD	.1013	968.2	.4885	17.82	78.61	31.52	.6525
#1	4.337	.0000	.6158	.0006	-.0010	.0002	.0085
#2	4.336	-.0002	.6211	.0008	-.0005	.0004	.0086
#3	4.344	.0003	.6160	.0006	-.0001	.0003	.0086

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1973.0	5486.8	41768.	3485.2
Stddev	4.2	18.2	220.	14.1
%RSD	.21498	.33149	.52565	.40462
#1	1973.8	5476.6	41948.	3470.5
#2	1976.7	5507.8	41832.	3498.6
#3	1968.4	5475.9	41524.	3486.7

Zoom In Zoom Out

Sample Name: FA40614-7 Acquired: 1/26/2017 14:01:13 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0002	.0024	.0019	.0158	-.0001	45.13	-.0001	-.0001	.0005
Stddev	.0004	.0078	.0009	.0003	.0001	.19	.0000	.0001	.0003
%RSD	171.9	333.6	46.43	2.076	116.6	.4144	28.13	93.91	48.90
#1	-.0002	.0051	.0012	.0155	-.0001	45.06	-.0001	-.0002	.0002
#2	.0004	-.0065	.0016	.0159	.0000	45.00	-.0001	-.0001	.0007
#3	.0004	.0084	.0029	.0161	-.0001	45.35	-.0001	.0000	.0006

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0003	.4501	1.480	5.314	.0075	-.0008	F184.7	.0000	-.0004
Stddev	.0004	.0047	.054	.034	.0001	.0001	1.3	.0000	.0005
%RSD	153.8	1.036	3.629	.6447	.7779	8.533	.7219	238.9	124.5
#1	.0001	.4485	1.420	5.295	.0074	-.0008	184.5	.0000	-.0007
#2	-.0002	.4464	1.522	5.294	.0074	-.0007	183.4	.0001	-.0007
#3	-.0007	.4553	1.499	5.354	.0075	-.0008	186.1	.0000	.0002

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0017	.0014	4.991	-.0002	1.421	.0006	-.0009	.0005	.0012
Stddev	.0008	.0013	.007	.0002	.004	.0001	.0009	.0002	.0000
%RSD	48.26	91.23	.1361	93.41	.3183	22.09	100.9	42.59	2.570
#1	.0022	.0000	4.997	-.0004	1.419	.0004	-.0013	.0002	.0012
#2	.0022	.0019	4.993	-.0001	1.418	.0007	-.0014	.0006	.0012
#3	.0008	.0025	4.983	-.0001	1.426	.0006	.0001	.0005	.0012

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1897.2	5366.8	40273.	3466.1
Stddev	1.1	4.6	161.	33.5
%RSD	.06016	.08586	.39878	.96510
#1	1898.5	5368.0	40211.	3494.7
#2	1896.9	5370.7	40456.	3474.2
#3	1896.3	5361.7	40153.	3429.3

Zoom In Zoom Out

Sample Name: FA40614-9 Acquired: 1/26/2017 14:05:29 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	.0171	.0046	.0108	-.0002	86.14	-.0001	-.0002	.0008	-.0002
Stddev	.0002	.0113	.0001	.0002	.0001	.14	.0000	.0001	.0002	.0003
%RSD	240.0	66.26	2.231	1.580	43.19	.1579	46.25	59.91	27.55	192.6
#1	.0000	.0218	.0046	.0107	-.0003	85.98	-.0001	-.0001	.0009	.0001
#2	.0003	.0253	.0047	.0106	-.0002	86.23	-.0001	-.0002	.0010	-.0001
#3	.0000	.0042	.0045	.0110	-.0001	86.20	-.0001	-.0003	.0006	-.0005

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	1.448	1.691	2.958	.0138	-.0012	9.856	.0001	-.0006	.0006	.0003
Stddev	.006	.020	.037	.0000	.0002	.025	.0002	.0004	.0011	.0018
%RSD	.4250	1.158	1.243	.2043	14.85	.2495	123.8	68.41	170.6	604.5
#1	1.443	1.669	2.964	.0138	-.0010	9.833	.0003	-.0002	.0018	.0019
#2	1.455	1.702	2.919	.0139	-.0013	9.853	.0000	-.0006	-.0002	-.0017
#3	1.447	1.704	2.992	.0138	-.0012	9.882	.0002	-.0010	.0003	.0007

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.366	-.0001	.5094	.0004	-.0007	.0009	.0650
Stddev	.010	.0001	.0008	.0000	.0005	.0002	.0002
%RSD	.4246	265.4	.1558	2.912	74.00	27.39	.2518
#1	2.355	.0001	.5085	.0004	-.0013	.0010	.0650
#2	2.367	.0000	.5100	.0004	-.0005	.0006	.0648
#3	2.375	-.0002	.5096	.0004	-.0003	.0011	.0652

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2005.0	5518.2	41725.	3502.7
Stddev	8.2	16.4	168.	8.2
%RSD	.40761	.29778	.40195	.23468
#1	1997.1	5512.3	41706.	3510.8
#2	2013.4	5536.8	41901.	3494.4
#3	2004.4	5505.5	41567.	3503.0

Zoom In Zoom Out

Sample Name: FA40614-10 Acquired: 1/26/2017 14:09:39 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0005	.0035	.0004	.0086	-.0001	58.62	-.0001	-.0002	.0006	.0000
Stddev	.0003	.0049	.0005	.0002	.0001	.14	.0001	.0001	.0003	.0000
%RSD	67.66	141.6	149.2	2.794	55.20	.2401	56.18	35.89	43.29	371.3
#1	.0005	.0014	.0008	.0088	-.0002	58.65	.0000	-.0002	.0008	.0000
#2	.0002	.0000	-.0002	.0083	-.0001	58.74	-.0002	-.0003	.0003	.0000
#3	.0009	.0091	.0006	.0087	-.0001	58.46	-.0001	-.0002	.0007	.0000

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	2.508	.9496	6.667	.0268	.0454	19.95	.0000	-.0005	.0016	.0017
Stddev	.002	.0164	.022	.0001	.0001	.04	.000	.0002	.0008	.0001
%RSD	.0832	1.725	.3382	.3448	.3195	.1866	6277.	33.71	51.61	5.738
#1	2.510	.9308	6.659	.0269	.0453	19.93	-.0001	-.0007	.0011	.0017
#2	2.509	.9605	6.650	.0268	.0455	20.00	.0000	-.0003	.0012	.0018
#3	2.506	.9575	6.692	.0267	.0453	19.94	.0002	-.0006	.0026	.0017

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.100	-.0002	.6544	.0003	-.0006	-.0001	.0130
Stddev	.009	.0004	.0001	.0002	.0002	.0001	.0000
%RSD	.2818	229.8	.0216	69.31	35.46	113.9	.1831
#1	3.095	.0003	.6545	.0001	-.0005	-.0002	.0130
#2	3.096	-.0005	.6545	.0003	-.0009	.0000	.0131
#3	3.110	-.0004	.6543	.0005	-.0005	.0000	.0130

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2003.5	5538.1	41829.	3484.7
Stddev	3.6	11.3	108.	22.6
%RSD	.17877	.20419	.25846	.64840
#1	2006.5	5525.1	41897.	3492.8
#2	2004.5	5545.5	41885.	3459.1
#3	1999.5	5543.8	41704.	3502.1

SGS ACCUTEST FA40657

Zoom In Zoom Out

Sample Name: FA40614-11 Acquired: 1/26/2017 14:13:48 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0006	.0131	.0004	.0126	-.0002	70.28	-.0001	.0000	.0008
Stddev	.0006	.0071	.0008	.0001	.0001	.04	.0000	.000	.0004
%RSD	90.80	54.09	173.7	.6029	62.83	.0618	10.79	312.5	44.02
#1	.0007	.0206	-.0004	.0125	-.0001	70.27	-.0001	.0000	.0011
#2	.0011	.0119	.0011	.0125	-.0003	70.33	-.0001	.0000	.0009
#3	.0000	.0066	.0006	.0126	-.0003	70.25	-.0001	-.0001	.0004

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0003	.7854	1.919	7.218	.0208	-.0012	F164.2	-.0001	-.0011
Stddev	.0001	.0071	.013	.021	.0000	.0002	.2	.0001	.0001
%RSD	49.57	.9085	.6811	.2871	.1626	14.42	.1258	92.18	12.61
#1	.0001	.7779	1.905	7.203	.0207	-.0011	164.4	-.0001	-.0010
#2	.0004	.7862	1.930	7.210	.0208	-.0014	164.3	-.0002	-.0010
#3	.0003	.7921	1.923	7.241	.0208	-.0012	164.0	.0000	-.0012

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0006	.0001	6.326	-.0003	1.389	.0009	-.0009	.0002	.0053
Stddev	.0009	.0020	.014	.0002	.002	.0000	.0007	.0003	.0001
%RSD	153.5	4025.	.2270	77.38	.1399	1.698	77.36	137.8	1.837
#1	.0014	.0016	6.315	.0000	1.391	.0009	-.0006	-.0001	.0052
#2	.0007	.0008	6.322	-.0005	1.390	.0009	-.0004	.0004	.0054
#3	-.0004	-.0022	6.342	-.0004	1.387	.0009	-.0017	.0004	.0052

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1878.1	5393.7	39929.	3415.9
Stddev	3.3	6.8	113.	19.7
%RSD	.17349	.12692	.28176	.57685
#1	1881.2	5398.1	40014.	3438.6
#2	1874.7	5397.3	39801.	3404.7
#3	1878.3	5385.8	39971.	3404.3

Zoom In Zoom Out

Sample Name: FA40614-12 Acquired: 1/26/2017 14:17:58 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0002	-.0066	.0005	.0108	.0000	94.51	-.0002	-.0002	.0007	.0002
Stddev	.0004	.0125	.0008	.0004	.000	.41	.0000	.0001	.0001	.0001
%RSD	168.7	189.6	154.0	3.881	142.6	.4381	21.82	41.55	16.81	54.52
#1	.0000	.0050	.0007	.0103	-.0001	94.88	-.0001	-.0001	.0008	.0001
#2	.0000	-.0198	.0013	.0111	.0000	94.61	-.0002	-.0003	.0006	.0003
#3	.0007	-.0049	-.0003	.0108	.0000	94.06	-.0002	-.0002	.0008	.0002

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	3.111	.4085	4.017	.0271	.0008	15.11	.0001	.0002	.0018	.0002
Stddev	.005	.0488	.024	.0001	.0002	.06	.0001	.0005	.0003	.0020
%RSD	.1628	11.94	.5937	.3446	18.07	.4271	84.82	331.4	19.12	1169.
#1	3.116	.4455	4.044	.0271	.0010	15.16	.0002	-.0004	.0019	.0024
#2	3.109	.3532	3.997	.0270	.0008	15.14	.0002	.0007	.0020	-.0004
#3	3.107	.4266	4.011	.0272	.0007	15.04	.0000	.0002	.0014	-.0015

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.426	.0001	.6875	.0005	-.0001	.0005	.0011
Stddev	.008	.0003	.0042	.0002	.0004	.0001	.0000
%RSD	.2223	387.9	.6137	33.03	327.3	15.23	2.661
#1	3.428	-.0002	.6912	.0006	-.0002	.0005	.0011
#2	3.432	.0002	.6884	.0003	-.0005	.0005	.0011
#3	3.417	.0002	.6829	.0006	.0003	.0006	.0010

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1981.1	5507.1	41181.	3426.9
Stddev	5.3	16.1	43.	9.3
%RSD	.26681	.29167	.10385	.27104
#1	1975.0	5490.5	41181.	3420.7
#2	1983.6	5508.1	41224.	3422.4
#3	1984.6	5522.6	41139.	3437.5

Zoom In Zoom Out

Sample Name: FA40531-7 Acquired: 1/26/2017 14:22:08 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0004	.0239	.0117	.0125	-.0001	80.93	.0016	-.0001	.0013
Stddev	.0003	.0087	.0009	.0005	.0001	.32	.0001	.0000	.0000
%RSD	78.40	36.50	7.866	3.616	119.2	.3906	5.124	32.62	.8490
#1	.0006	.0159	.0115	.0124	-.0002	80.89	.0017	-.0001	.0013
#2	.0000	.0331	.0127	.0130	.0000	81.27	.0015	-.0001	.0013
#3	.0005	.0226	.0109	.0121	.0000	80.64	.0016	-.0001	.0013

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0001	5.687	5.568	3.692	.0494	.0063	F874.8	.0010	.0006
Stddev	.0002	.015	.039	.029	.0004	.0002	21.9	.0001	.0011
%RSD	270.4	.2543	.6981	.7711	.7692	3.068	2.499	11.95	173.4
#1	.0002	5.683	5.527	3.725	.0493	.0061	891.5	.0009	-.0006
#2	.0002	5.703	5.605	3.675	.0497	.0064	882.7	.0011	.0013
#3	-.0002	5.674	5.572	3.675	.0490	.0063	850.0	.0009	.0013

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0028	-.0003	3.457	.0002	.5684	.0009	-.0015	.0006	F64.61
Stddev	.0010	.0033	.009	.0002	.0028	.0001	.0007	.0002	.35
%RSD	34.18	1084.	.2715	146.0	.4863	12.38	42.25	28.53	.5398
#1	-.0017	-.0014	3.458	.0001	.5679	.0008	-.0016	.0005	64.97
#2	-.0036	.0034	3.447	.0004	.5713	.0010	-.0022	.0008	64.57
#3	-.0031	-.0029	3.465	.0000	.5658	.0009	-.0009	.0006	64.27

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1663.3	4993.8	36282.	3339.0
Stddev	1.6	9.4	205.	20.7
%RSD	.09373	.18873	.56538	.61948
#1	1664.3	4995.1	36129.	3329.7
#2	1664.0	5002.5	36203.	3324.6
#3	1661.5	4983.8	36515.	3362.7

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/26/2017 14:26:34 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2547	38.82	1.927	1.962	1.978	38.96	1.973	1.964	1.981	1.968
Stddev	.0008	.13	.004	.008	.004	.14	.003	.003	.002	.002
%RSD	.3185	.3325	.2077	.4175	.1977	.3705	.1596	.1508	.0805	.0869
#1	.2540	38.75	1.922	1.955	1.977	38.90	1.970	1.961	1.979	1.970
#2	.2546	38.97	1.928	1.971	1.982	39.12	1.972	1.964	1.982	1.969
#3	.2556	38.75	1.930	1.959	1.974	38.85	1.976	1.967	1.981	1.967

Check ? Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	39.25	38.55	38.52	2.018	2.032	38.16	1.950	1.964	1.942	1.930
Stddev	.12	.18	.14	.001	.004	.06	.006	.005	.000	.009
%RSD	.3162	.4609	.3672	.0256	.1827	.1542	.3086	.2587	.0159	.4384
#1	39.22	38.51	38.39	2.018	2.029	38.14	1.944	1.963	1.942	1.925
#2	39.39	38.75	38.67	2.018	2.030	38.23	1.950	1.959	1.942	1.925
#3	39.15	38.40	38.50	2.019	2.036	38.12	1.956	1.969	1.942	1.939

Check ? Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.513	2.037	2.045	2.086	1.979	2.043	1.984
Stddev	.002	.004	.005	.003	.004	.003	.002
%RSD	.0677	.1733	.2470	.1249	.2222	.1555	.1216
#1	2.512	2.037	2.044	2.083	1.981	2.040	1.984
#2	2.515	2.034	2.050	2.086	1.974	2.046	1.982
#3	2.513	2.041	2.040	2.088	1.982	2.044	1.987

Check ? None Chk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/26/2017 14:26:34 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1871.5	5453.6	40534.	3417.6
Stddev	3.2	9.2	143.	34.9
%RSD	.16905	.16935	.35317	1.0203
#1	1871.9	5462.5	40690.	3450.8
#2	1874.4	5454.1	40504.	3381.3
#3	1868.1	5444.0	40409.	3420.8

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/26/2017 14:30:29 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0037	.0002	.0003	.0000	.0003	.0000	-.0001	.0005	.0003
Stddev	.0002	.0129	.0003	.0001	.0001	.0001	.0000	.0000	.0002	.0001
%RSD	52.64	347.4	138.2	42.24	333.9	55.14	154.3	94.00	43.51	19.06
#1	.0003	.0083	.0000	.0002	.0000	.0001	.0000	-.0001	.0003	.0003
#2	.0006	.0137	.0001	.0002	.0000	.0003	.0000	-.0001	.0007	.0003
#3	.0002	-.0109	.0005	.0004	.0001	.0003	.0000	.0000	.0004	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0065	-.0279	.0192	.0001	.0005	.1369	.0001	.0009	.0011	.0006
Stddev	.0028	.0223	.0130	.0000	.0005	.0076	.0002	.0004	.0008	.0016
%RSD	43.72	79.91	67.65	36.81	101.2	5.532	220.6	41.49	76.04	281.0
#1	.0084	-.0482	.0229	.0001	.0011	.1362	.0003	.0013	.0019	-.0010
#2	.0032	-.0313	.0047	.0000	.0003	.1448	-.0001	.0006	.0003	.0022
#3	.0078	-.0041	.0298	.0001	.0001	.1297	.0001	.0007	.0009	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0001	.0001	.0001	.0003	.0003	.0004
Stddev	.0003	.0001	.0002	.0000	.0014	.0002	.0001
%RSD	1437.	168.8	160.3	23.91	511.7	82.76	18.44
#1	.0002	.0000	.0000	.0001	.0018	.0003	.0005
#2	.0002	.0001	.0003	.0001	-.0002	.0004	.0003
#3	-.0004	.0002	.0000	.0001	-.0008	.0000	.0004
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/26/2017 14:30:29 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2075.3	5626.8	42276.	3439.1
Stddev	8.4	20.5	224.	3.2
%RSD	.40651	.36446	.52901	.09164
#1	2085.1	5648.2	42080.	3442.2
#2	2070.6	5624.8	42230.	3435.9
#3	2070.3	5607.3	42520.	3439.2

Zoom In Zoom Out

Sample Name: FA40618-1 Acquired: 1/26/2017 14:34:43 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0005	.0121	.0006	.2488	-.0001	170.6	-.0001	.0135	.0007	.0008
Stddev	.0001	.0167	.0002	.0003	.0001	.6	.0000	.0000	.0001	.0001
%RSD	12.40	138.4	38.75	.1064	77.72	.3643	29.41	.1244	16.63	17.86
#1	.0005	.0247	.0003	.2490	.0000	170.9	-.0001	.0135	.0008	.0010
#2	.0005	-.0069	.0007	.2485	-.0002	169.9	-.0001	.0135	.0005	.0007
#3	.0004	.0185	.0006	.2489	-.0001	171.1	-.0001	.0135	.0007	.0008

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.3394	14.68	45.91	2.196	.0082	42.56	.0123	-.0003	.0014	.0000
Stddev	.0036	.04	.21	.001	.0001	.19	.0001	.0002	.0008	.000
%RSD	1.048	.2836	.4658	.0577	1.216	.4434	1.124	60.90	59.30	5981.
#1	.3435	14.68	45.99	2.195	.0082	42.59	.0122	-.0005	.0004	.0004
#2	.3370	14.72	45.67	2.197	.0083	42.36	.0123	-.0001	.0018	.0000
#3	.3377	14.63	46.07	2.196	.0081	42.73	.0125	-.0003	.0020	-.0004

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	13.62	.0001	1.076	.0009	.0008	.0010	.0054
Stddev	.02	.0003	.004	.0001	.0002	.0000	.0000
%RSD	.1788	313.3	.4191	13.19	25.01	3.052	.7844
#1	13.60	.0003	1.077	.0008	.0006	.0010	.0055
#2	13.61	.0001	1.071	.0007	.0010	.0009	.0054
#3	13.65	-.0002	1.080	.0010	.0009	.0010	.0054

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1888.9	5353.2	40472.	3432.7
Stddev	6.1	11.4	78.	17.3
%RSD	.32457	.21376	.19297	.50518
#1	1892.8	5360.5	40384.	3412.8
#2	1892.0	5359.0	40504.	3444.6
#3	1881.8	5340.0	40530.	3440.8

Zoom In Zoom Out

Sample Name: FA40629-2 Acquired: 1/26/2017 14:38:53 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0014	.0233	12.99	.2368	-.0004	32.65	-.0003	.0245	.6094
Stddev	.0025	.0558	.03	.0010	.0002	.17	.0002	.0007	.0030
%RSD	178.6	239.2	.2468	.4119	37.41	.5242	51.89	2.694	.4921
#1	.0002	-.0041	13.00	.2363	-.0003	32.75	-.0001	.0247	.6111
#2	-.0003	.0875	12.95	.2362	-.0005	32.46	-.0005	.0250	.6059
#3	.0044	-.0134	13.00	.2380	-.0006	32.76	-.0004	.0237	.6112

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0257	3.634	235.4	61.06	.3230	.0654	F3878.	.2992	.0036
Stddev	.0008	.014	.4	.51	.0021	.0004	46.	.0013	.0018
%RSD	3.146	.3912	.1764	.8404	.6512	.6365	1.185	.4312	49.19
#1	.0264	3.640	235.0	61.28	.3240	.0659	3923.	.2988	.0016
#2	.0248	3.618	235.5	60.47	.3206	.0651	3831.	.3007	.0047
#3	.0258	3.644	235.8	61.42	.3244	.0652	3880.	.2983	.0047

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0229	.0264	4.545	.0023	1.565	.0783	-.0047	.0760	.0567
Stddev	.0038	.0079	.007	.0009	.007	.0007	.0051	.0002	.0004
%RSD	16.79	29.95	.1462	37.20	.4309	.8439	108.7	.2752	.7452
#1	.0256	.0175	4.538	.0017	1.568	.0775	-.0078	.0758	.0566
#2	.0246	.0294	4.548	.0020	1.557	.0788	-.0075	.0763	.0563
#3	.0185	.0324	4.551	.0033	1.569	.0786	.0012	.0760	.0571

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1689.8	5021.6	36592.	3355.1
Stddev	1.9	4.2	73.	21.0
%RSD	.11146	.08331	.19824	.62679
#1	1687.7	5017.4	36509.	3360.5
#2	1691.3	5021.6	36620.	3372.9
#3	1690.4	5025.7	36646.	3331.9

Zoom In Zoom Out

Sample Name: FA40645-1 Acquired: 1/26/2017 14:43:08 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	-.0034	.0085	.0180	-.0002	87.31	-.0002	-.0001	.0004	.0001
Stddev	.0004	.0057	.0002	.0002	.0000	.05	.0000	.0000	.0000	.0002
%RSD	254.5	171.2	2.734	1.293	27.14	.0601	20.18	52.67	8.479	271.1
#1	.0000	-.0008	.0086	.0177	-.0001	87.24	-.0002	-.0001	.0004	.0002
#2	-.0001	.0007	.0086	.0182	-.0002	87.34	-.0002	-.0001	.0005	.0002
#3	.0006	-.0099	.0082	.0180	-.0002	87.33	-.0002	.0000	.0005	-.0002

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	7.169	1.564	9.908	.0286	.0086	51.20	-.0001	.0005	.0012	.0008
Stddev	.002	.045	.012	.0002	.0001	.13	.0002	.0003	.0008	.0011
%RSD	.0323	2.852	.1200	.5479	1.672	.2602	165.8	56.38	71.37	129.4
#1	7.172	1.615	9.904	.0284	.0087	51.07	-.0002	.0005	.0011	.0000
#2	7.169	1.545	9.898	.0287	.0086	51.20	.0001	.0003	.0004	.0020
#3	7.167	1.532	9.921	.0287	.0084	51.34	-.0003	.0009	.0021	.0004

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.508	-.0001	1.677	.0003	.0000	.0002	.0007
Stddev	.004	.0002	.003	.0001	.001	.0002	.0000
%RSD	.0788	152.7	.1469	17.17	1761.	73.27	6.711
#1	5.509	-.0002	1.680	.0004	-.0006	.0004	.0006
#2	5.503	.0001	1.676	.0003	.0005	.0003	.0007
#3	5.512	-.0002	1.675	.0003	.0000	.0000	.0006

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1944.5	5449.0	41284.	3429.7
Stddev	3.2	5.0	176.	33.7
%RSD	.16630	.09125	.42705	.98363
#1	1948.2	5454.3	41485.	3467.5
#2	1942.0	5444.4	41214.	3418.8
#3	1943.5	5448.4	41154.	3402.7

Zoom In Zoom Out

Sample Name: FA40645-4 Acquired: 1/26/2017 14:47:18 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0002	.0061	.0424	.0113	-.0002	79.79	-.0001	-.0002	.0006	-.0001
Stddev	.0002	.0080	.0007	.0002	.0002	.27	.0000	.0001	.0001	.0004
%RSD	107.0	131.3	1.580	1.345	96.09	.3415	32.23	49.19	19.15	623.2
#1	.0005	-.0008	.0425	.0113	-.0003	80.09	-.0001	-.0001	.0006	-.0003
#2	.0000	.0148	.0416	.0111	.0000	79.71	-.0001	-.0002	.0007	.0004
#3	.0001	.0042	.0429	.0114	-.0001	79.56	-.0001	-.0002	.0005	-.0003

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	1.039	2.092	2.332	.0182	-.0013	19.28	-.0001	-.0004	-.0001	.0011
Stddev	.003	.010	.021	.0002	.0000	.06	.0002	.0004	.0005	.0005
%RSD	.2615	.4950	.8798	1.086	3.207	.3050	243.1	116.9	403.1	50.20
#1	1.036	2.098	2.338	.0180	-.0012	19.32	-.0003	.0000	-.0005	.0015
#2	1.040	2.080	2.349	.0183	-.0013	19.29	-.0001	-.0002	-.0003	.0013
#3	1.042	2.098	2.309	.0184	-.0012	19.21	.0001	-.0008	.0005	.0005

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.626	.0001	.5142	.0005	.0001	.0007	.0011
Stddev	.006	.0003	.0019	.0001	.0003	.0001	.0000
%RSD	.2220	583.1	.3722	16.81	389.2	18.39	1.649
#1	2.625	.0004	.5161	.0007	.0005	.0008	.0011
#2	2.633	-.0003	.5142	.0005	-.0002	.0007	.0010
#3	2.622	.0001	.5123	.0005	.0000	.0005	.0010

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1993.9	5482.6	41609.	3452.0
Stddev	5.3	8.0	86.	25.8
%RSD	.26772	.14637	.20619	.74710
#1	1999.8	5486.8	41704.	3428.3
#2	1989.4	5473.3	41537.	3479.5
#3	1992.4	5487.6	41586.	3448.3

Zoom In Zoom Out

Sample Name: FA40649-9 Acquired: 1/26/2017 14:51:30 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	.0138	.0005	.0083	.0000	38.35	-.0001	-.0001	.0006	-.0004
Stddev	.0006	.0083	.0006	.0002	.0001	.25	.0000	.0001	.0002	.0002
%RSD	935.4	60.01	120.0	2.843	2322.	.6554	68.51	75.87	36.22	36.19
#1	.0005	.0044	-.0002	.0082	.0001	38.24	-.0001	-.0001	.0005	-.0003
#2	-.0006	.0170	.0007	.0085	.0000	38.63	.0000	-.0001	.0008	-.0006
#3	.0003	.0199	.0009	.0081	-.0001	38.17	.0000	-.0003	.0004	-.0004

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.4396	1.632	2.186	.0128	.0189	27.17	-.0001	-.0007	.0002	-.0011
Stddev	.0067	.031	.031	.0000	.0001	.16	.0001	.0002	.0012	.0023
%RSD	1.518	1.894	1.431	.1382	.7155	.5747	65.61	22.96	558.9	203.9
#1	.4352	1.667	2.194	.0128	.0188	27.10	-.0001	-.0005	.0014	-.0035
#2	.4473	1.610	2.212	.0128	.0190	27.35	-.0002	-.0008	.0002	-.0011
#3	.4364	1.619	2.151	.0128	.0189	27.06	-.0001	-.0007	-.0010	.0012

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.383	-.0001	.3553	.0003	-.0002	.0000	.0006
Stddev	.002	.0001	.0022	.0002	.0004	.001	.0000
%RSD	.0816	118.7	.6292	61.61	254.0	1326.	1.872
#1	2.384	-.0002	.3558	.0004	.0000	-.0006	.0006
#2	2.380	-.0001	.3573	.0004	.0002	.0003	.0006
#3	2.383	.0000	.3529	.0001	-.0007	.0003	.0006

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2018.1	5517.6	41911.	3457.0
Stddev	1.7	15.6	79.	31.1
%RSD	.08321	.28336	.18819	.90073
#1	2019.9	5534.2	41871.	3478.9
#2	2016.5	5503.1	41861.	3421.3
#3	2018.0	5515.5	42002.	3470.7

Zoom In Zoom Out

Sample Name: FA40656-1 Acquired: 1/26/2017 14:55:41 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0002	-.0080	.0015	.0617	-.0001	163.4	-.0002	-.0001	.0007
Stddev	.0002	.0089	.0001	.0004	.0001	.4	.0000	.0001	.0003
%RSD	107.8	112.0	6.143	.5815	128.3	.2266	23.14	149.7	40.81
#1	.0000	-.0161	.0014	.0618	-.0001	163.8	-.0002	.0000	.0004
#2	.0001	.0016	.0016	.0613	-.0002	163.1	-.0002	-.0001	.0010
#3	.0004	-.0093	.0015	.0620	.0000	163.1	-.0001	-.0001	.0006

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0003	1.378	2.644	25.25	.0161	-.0022	F185.8	.0000	-.0001
Stddev	.0002	.007	.007	.17	.0001	.0001	.7	.0001	.0007
%RSD	67.50	.4893	.2606	.6895	.6122	3.119	.3841	420.0	995.7
#1	-.0003	1.382	2.650	25.19	.0160	-.0023	186.1	-.0001	-.0003
#2	-.0001	1.370	2.646	25.45	.0162	-.0022	185.0	.0002	-.0006
#3	-.0006	1.382	2.637	25.11	.0161	-.0022	186.3	.0000	.0007

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0010	-.0002	9.127	-.0002	1.123	.0002	-.0012	.0002	.0029
Stddev	.0010	.0002	.013	.0004	.005	.0001	.0014	.0003	.0001
%RSD	104.8	78.07	.1413	219.7	.4243	40.49	114.4	166.9	2.596
#1	.0012	-.0004	9.113	.0002	1.123	.0003	-.0009	-.0002	.0029
#2	.0019	.0000	9.132	-.0005	1.118	.0002	.0000	.0003	.0028
#3	-.0001	-.0002	9.137	-.0003	1.128	.0001	-.0027	.0004	.0028

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1843.7	5246.7	39612.	3429.9
Stddev	3.4	3.9	35.	14.2
%RSD	.18204	.07487	.08896	.41344
#1	1840.9	5248.5	39595.	3416.6
#2	1847.4	5249.4	39652.	3444.8
#3	1842.9	5242.2	39587.	3428.2

Zoom In Zoom Out

Sample Name: FA40660-1 Acquired: 1/26/2017 14:59:59 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0003	.1025	-.0004	.0111	-.0001	3.335	.0000	.0001	.0003	-.0002
Stddev	.0001	.0163	.0006	.0001	.0001	.018	.000	.0001	.0001	.0003
%RSD	43.06	15.87	144.3	.7898	89.16	.5496	1008.	68.38	46.84	153.6
#1	-.0004	.0989	-.0011	.0110	.0000	3.355	.0000	.0001	.0003	-.0001
#2	-.0003	.0884	-.0004	.0110	-.0001	3.330	.0000	.0002	.0004	-.0006
#3	-.0002	.1203	.0002	.0112	-.0001	3.320	.0000	.0000	.0002	.0000

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0625	.4851	1.275	.0015	-.0014	3.314	.0009	.0003	.0015	.0002
Stddev	.0008	.0459	.027	.0000	.0002	.020	.0003	.0003	.0008	.0000
%RSD	1.207	9.457	2.100	2.770	10.97	.6154	28.49	109.0	52.31	15.00
#1	.0624	.4980	1.267	.0015	-.0016	3.329	.0010	.0003	.0008	.0002
#2	.0633	.5232	1.254	.0014	-.0014	3.321	.0010	.0000	.0013	.0001
#3	.0618	.4342	1.305	.0015	-.0013	3.291	.0006	.0006	.0023	.0002

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.681	-.0001	.0068	.0025	-.0006	.0002	.0086
Stddev	.020	.0003	.0001	.0003	.0005	.0001	.0000
%RSD	.5485	242.2	1.330	13.21	83.73	43.50	.2780
#1	3.664	.0001	.0068	.0022	-.0009	.0002	.0086
#2	3.676	.0000	.0068	.0028	-.0009	.0003	.0086
#3	3.704	-.0005	.0067	.0024	.0000	.0001	.0086

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2110.0	5630.2	43146.	3530.0
Stddev	2.0	19.1	121.	27.7
%RSD	.09490	.33991	.28089	.78383
#1	2111.7	5651.9	43286.	3519.6
#2	2110.4	5615.8	43081.	3509.0
#3	2107.8	5622.8	43070.	3561.3

Zoom In Zoom Out

Sample Name: MP31552-MB1 Acquired: 1/26/2017 15:04:12 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0004	-.0006	.0002	-.0001	.0033	-.0001	-.0001	.0002	-.0004
Stddev	.0001	.0082	.0007	.0002	.0001	.0043	.0000	.0001	.0002	.0003
%RSD	59.46	1877.	113.9	81.91	73.45	128.8	34.42	54.86	79.72	61.35
#1	.0002	.0064	-.0014	.0002	-.0001	.0000	-.0002	-.0001	.0003	-.0001
#2	.0001	-.0089	.0000	.0004	.0000	.0082	-.0001	-.0001	.0003	-.0006
#3	.0003	.0037	-.0004	.0000	-.0001	.0018	-.0001	-.0002	.0000	-.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0067	-.0253	-.0036	-.0001	-.0014	.0865	-.0002	.0004	.0019	-.0014
Stddev	.0022	.0288	.0013	.0000	.0001	.0071	.0002	.0003	.0017	.0006
%RSD	33.03	113.8	37.12	6.957	7.527	8.171	133.5	91.84	85.90	42.64
#1	-.0061	.0034	-.0040	-.0001	-.0015	.0808	-.0004	.0007	.0023	-.0007
#2	-.0091	-.0251	-.0046	-.0001	-.0013	.0845	.0000	.0003	.0034	-.0017
#3	-.0048	-.0543	-.0021	-.0001	-.0013	.0944	.0000	.0001	.0001	-.0018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0027	-.0002	.0000	-.0004	-.0005	-.0002	.0008
Stddev	.0005	.0002	.000	.0001	.0002	.0001	.0000
%RSD	20.39	66.23	843.7	14.70	42.60	56.55	5.826
#1	.0025	-.0002	.0000	-.0004	-.0007	-.0002	.0008
#2	.0023	-.0001	.0001	-.0004	-.0005	-.0001	.0009
#3	.0033	-.0004	-.0002	-.0003	-.0003	-.0003	.0009
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP31552-MB1 Acquired: 1/26/2017 15:04:12 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2103.0	5645.2	43293.	3485.3
Stddev	7.8	22.1	36.	16.3
%RSD	.37121	.39092	.08294	.46878
#1	2105.8	5662.4	43253.	3466.8
#2	2109.0	5652.8	43324.	3491.4
#3	2094.1	5620.3	43302.	3497.7

Zoom In Zoom Out

Sample Name: MP31552-B1 Acquired: 1/26/2017 15:08:27 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0486	29.96	2.143	2.156	.0536	28.15	.0529	.5266	.2107	.2589
Stddev	.0003	.10	.009	.003	.0000	.03	.0001	.0012	.0007	.0006
%RSD	.5148	.3359	.4358	.1401	.0486	.1059	.2574	.2352	.3113	.2194
#1	.0489	29.92	2.136	2.157	.0537	28.14	.0527	.5256	.2102	.2592
#2	.0484	29.88	2.140	2.153	.0536	28.13	.0530	.5262	.2106	.2582
#3	.0485	30.07	2.154	2.158	.0536	28.19	.0529	.5280	.2115	.2592
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	28.94	28.39	27.94	.5275	.5672	27.73	.5420	.5092	.5251	2.123
Stddev	.04	.03	.05	.0013	.0016	.03	.0016	.0016	.0025	.011
%RSD	.1403	.0897	.1776	.2480	.2736	.1224	.3044	.3051	.4785	.5210
#1	28.93	28.39	27.96	.5261	.5657	27.76	.5406	.5083	.5226	2.114
#2	28.90	28.37	27.97	.5276	.5672	27.70	.5417	.5083	.5250	2.119
#3	28.98	28.42	27.88	.5287	.5688	27.75	.5438	.5110	.5276	2.135
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0618	.5863	.5649	.5625	2.044	.5057	.5284
Stddev	.0007	.0012	.0017	.0008	.004	.0016	.0013
%RSD	1.208	.2107	.3088	.1468	.2084	.3096	.2474
#1	.0622	.5854	.5639	.5622	2.042	.5040	.5270
#2	.0610	.5858	.5638	.5618	2.042	.5071	.5287
#3	.0623	.5877	.5669	.5634	2.049	.5060	.5296
Check ? Value Range	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass

Zoom In Zoom Out

Sample Name: MP31552-B1 Acquired: 1/26/2017 15:08:27 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1961.0	5489.8	41859.	3444.3
Stddev	4.1	16.7	200.	26.8
%RSD	.20844	.30371	.47681	.77926
#1	1965.1	5506.5	42012.	3457.6
#2	1960.9	5490.0	41932.	3462.0
#3	1956.9	5473.1	41633.	3413.5

Zoom In Zoom Out

Sample Name: FA40613-1 Acquired: 1/26/2017 15:12:24 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0002	.0006	.0004	.0202	-.0001	208.8	-.0002	.0000	.0006	-.0008
Stddev	.0003	.0077	.0002	.0002	.0001	.0	.0000	.000	.0002	.0004
%RSD	171.4	1353.	53.43	1.161	57.91	.0149	.2190	183.1	39.44	45.04
#1	-.0001	-.0024	.0002	.0205	-.0002	208.8	-.0002	-.0001	.0005	-.0008
#2	.0004	-.0052	.0005	.0202	.0000	208.8	-.0002	-.0001	.0004	-.0004
#3	.0002	.0093	.0004	.0200	-.0001	208.8	-.0002	.0000	.0009	-.0012

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0032	.0625	8.365	.0132	-.0019	1.485	.0004	.0004	.0003	.0015
Stddev	.0023	.0204	.029	.0000	.0002	.007	.0001	.0001	.0005	.0017
%RSD	71.84	32.67	.3427	.3735	11.96	.4504	31.04	36.74	205.4	109.8
#1	.0045	.0844	8.393	.0132	-.0016	1.477	.0006	.0005	-.0001	-.0004
#2	.0044	.0440	8.336	.0133	-.0020	1.489	.0004	.0002	.0009	.0026
#3	.0005	.0591	8.366	.0132	-.0021	1.489	.0004	.0004	.0000	.0024

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.1476	.0000	.1307	.0003	.0001	.0009	.0015
Stddev	.0030	.000	.0003	.0000	.0009	.0001	.0001
%RSD	2.039	673.4	.2496	17.69	1226.	12.49	3.747
#1	.1504	-.0001	.1307	.0003	.0010	.0010	.0015
#2	.1444	.0002	.1311	.0003	-.0008	.0010	.0015
#3	.1479	-.0002	.1304	.0002	.0000	.0008	.0014

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1940.5	5358.2	40984.	3412.8
Stddev	5.9	9.1	124.	26.1
%RSD	.30227	.16927	.30134	.76387
#1	1938.5	5360.6	40892.	3414.4
#2	1947.1	5365.9	41124.	3438.0
#3	1935.9	5348.2	40934.	3386.0

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/26/2017 15:16:34 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2565	38.25	1.987	1.955	1.928	38.36	1.980	1.970	1.962	1.909
Stddev	.0014	.06	.005	.004	.004	.05	.002	.002	.003	.004
%RSD	.5540	.1508	.2354	.1806	.2276	.1398	.0888	.1218	.1676	.2248
#1	.2553	38.27	1.982	1.955	1.923	38.40	1.979	1.969	1.960	1.905
#2	.2581	38.30	1.989	1.959	1.932	38.39	1.978	1.969	1.962	1.910
#3	.2562	38.19	1.990	1.952	1.927	38.30	1.982	1.973	1.966	1.913
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	38.17	39.00	38.71	1.953	2.012	38.45	2.010	1.922	1.923	1.996
Stddev	.01	.16	.20	.008	.003	.05	.005	.001	.005	.006
%RSD	.0161	.4110	.5167	.4110	.1335	.1336	.2675	.0373	.2861	.2790
#1	38.18	39.02	38.85	1.953	2.010	38.47	2.006	1.922	1.918	1.993
#2	38.17	39.14	38.80	1.945	2.012	38.50	2.008	1.923	1.929	2.002
#3	38.16	38.83	38.48	1.961	2.015	38.40	2.016	1.921	1.923	1.993
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.475	2.072	2.000	2.035	1.931	2.045	1.973
Stddev	.003	.004	.002	.009	.003	.002	.003
%RSD	.1114	.1807	.0885	.4351	.1368	.1111	.1273
#1	2.478	2.069	1.998	2.027	1.929	2.045	1.974
#2	2.472	2.071	2.001	2.044	1.930	2.042	1.970
#3	2.476	2.076	1.999	2.035	1.934	2.047	1.975
Check ? Value Range	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/26/2017 15:16:34 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1888.8	5397.5	40888.	3422.9
Stddev	1.4	2.3	88.	14.9
%RSD	.07309	.04213	.21514	.43550
#1	1888.2	5396.5	40927.	3406.6
#2	1890.3	5400.1	40949.	3426.3
#3	1887.7	5395.9	40787.	3435.9

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/26/2017 15:20:29 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	-.0046	.0005	.0004	.0001	.0002	.0000	-.0001	.0001	-.0002
Stddev	.0005	.0031	.0005	.0003	.0000	.0023	.0000	.0001	.0000	.0003
%RSD	628.9	68.34	119.1	84.28	41.35	1351.	558.5	113.4	58.32	123.9
#1	-.0005	-.0038	.0001	.0008	.0001	.0013	.0000	-.0001	.0000	.0000
#2	.0003	-.0080	.0002	.0002	.0001	.0017	.0000	.0000	.0001	-.0001
#3	.0004	-.0019	.0011	.0003	.0000	-.0025	.0000	.0000	.0001	-.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0058	-.0520	-.0002	.0001	.0006	.0495	-.0001	.0002	.0010	.0015
Stddev	.0049	.0031	.0048	.0000	.0003	.0063	.0002	.0002	.0006	.0015
%RSD	84.30	5.953	2619.	19.55	48.87	12.83	212.5	94.74	60.06	99.28
#1	.0065	-.0531	.0040	.0001	.0010	.0425	-.0001	.0001	.0017	.0008
#2	.0104	-.0485	.0009	.0001	.0005	.0548	-.0003	.0004	.0004	.0032
#3	.0006	-.0543	-.0055	.0001	.0004	.0510	.0001	.0001	.0010	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0001	.0000	.0002	.0006	.0000	.0001
Stddev	.0006	.0003	.0001	.0001	.0008	.000	.0000
%RSD	311.0	242.8	883.2	26.96	141.3	718.8	17.15
#1	-.0005	.0005	.0001	.0002	.0009	.0001	.0001
#2	.0008	-.0001	.0001	.0001	-.0004	.0001	.0001
#3	.0003	.0000	-.0001	.0002	.0012	-.0003	.0001
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/26/2017 15:20:29 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2088.3	5591.4	42543.	3443.6
Stddev	1.6	8.2	175.	29.4
%RSD	.07833	.14692	.41150	.85305
#1	2089.3	5583.0	42700.	3475.5
#2	2089.2	5599.5	42354.	3437.6
#3	2086.4	5591.7	42575.	3417.6

Zoom In Zoom Out

Sample Name: MP31552-D1 Acquired: 1/26/2017 15:24:44 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0002	.0033	-.0008	.0201	.0000	207.5	-.0002	-.0001	.0002	-.0008
Stddev	.0006	.0083	.0004	.0002	.000	1.2	.0000	.0000	.0002	.0003
%RSD	332.4	250.8	47.92	.9103	115.4	.5622	12.74	15.91	114.8	35.27
#1	.0008	.0108	-.0005	.0199	.0000	208.4	-.0002	-.0001	.0000	-.0006
#2	.0001	.0048	-.0013	.0203	.0000	207.8	-.0002	-.0001	.0004	-.0007
#3	-.0004	-.0056	-.0007	.0201	-.0001	206.2	-.0002	-.0001	.0001	-.0012

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	-.0064	.0719	8.292	.0131	-.0018	1.439	.0005	.0008	.0011	-.0006
Stddev	.0028	.0229	.038	.0001	.0001	.005	.0001	.0004	.0006	.0020
%RSD	44.37	31.86	.4631	.3895	5.116	.3550	24.37	47.69	58.52	332.1
#1	-.0057	.0459	8.332	.0132	-.0017	1.438	.0004	.0004	.0018	-.0022
#2	-.0095	.0811	8.255	.0131	-.0017	1.445	.0007	.0011	.0009	-.0012
#3	-.0040	.0888	8.287	.0131	-.0019	1.435	.0005	.0010	.0005	.0016

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.1537	-.0002	.1305	.0003	.0003	.0009	.0013
Stddev	.0016	.0001	.0009	.0000	.0008	.0002	.0001
%RSD	1.020	59.32	.7037	16.60	242.9	23.64	4.148
#1	.1529	-.0002	.1314	.0003	.0006	.0009	.0013
#2	.1528	-.0001	.1306	.0003	-.0006	.0007	.0014
#3	.1556	-.0004	.1295	.0002	.0011	.0012	.0013

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1943.2	5365.9	40926.	3424.2
Stddev	7.0	6.6	164.	12.4
%RSD	.36105	.12365	.40092	.36264
#1	1949.4	5372.6	41068.	3412.9
#2	1935.6	5359.4	40746.	3422.3
#3	1944.6	5365.6	40963.	3437.5

Zoom In Zoom Out

Sample Name: MP31552-SD1 Acquired: 1/26/2017 15:28:56 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0015	.0065	.0012	.0207	-.0006	213.0	-.0001	-.0004	-.0001	-.0009
Stddev	.0011	.0230	.0043	.0006	.0004	.3	.0001	.0003	.0013	.0002
%RSD	71.17	354.5	357.9	3.108	70.66	.1501	100.5	88.88	1105.	20.21
#1	.0027	.0101	.0019	.0214	-.0004	212.9	-.0002	-.0001	.0014	-.0007
#2	.0007	.0275	.0051	.0205	-.0011	213.3	.0000	-.0003	-.0010	-.0011
#3	.0011	-.0181	-.0034	.0202	-.0003	212.7	-.0002	-.0007	-.0008	-.0010

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	-.0305	-.1289	8.577	.0134	-.0087	1.496	.0003	-.0034	.0015	.0007
Stddev	.0009	.0099	.087	.0002	.0005	.031	.0005	.0025	.0046	.0011
%RSD	2.802	7.701	1.021	1.251	5.549	2.098	199.4	72.24	297.1	166.1
#1	-.0301	-.1176	8.651	.0135	-.0091	1.514	.0007	-.0060	.0037	-.0001
#2	-.0298	-.1328	8.480	.0135	-.0081	1.460	-.0003	-.0011	.0046	.0019
#3	-.0314	-.1363	8.598	.0132	-.0088	1.515	.0005	-.0032	-.0037	.0001

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.1449	-.0010	.1313	.0016	.0012	.0002	.0481
Stddev	.0075	.0007	.0006	.0011	.0008	.0011	.0004
%RSD	5.195	67.23	.4523	68.23	68.29	439.2	.7799
#1	.1514	-.0017	.1318	.0014	.0015	-.0007	.0480
#2	.1367	-.0005	.1314	.0006	.0018	.0014	.0485
#3	.1468	-.0007	.1306	.0027	.0003	.0001	.0478

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2042.3	5545.0	41989.	3413.9
Stddev	5.7	4.8	148.	30.4
%RSD	.27879	.08602	.35288	.89075
#1	2048.7	5546.3	42143.	3448.4
#2	2040.1	5549.0	41848.	3390.9
#3	2037.9	5539.7	41977.	3402.4

Zoom In Zoom Out

Sample Name: MP31552-S1 Acquired: 1/26/2017 15:33:09 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0486	29.88	2.139	2.146	.0535	233.3	.0512	.5093	.2072	.2596
Stddev	.0001	.09	.010	.009	.0002	1.1	.0001	.0004	.0009	.0007
%RSD	.2792	.3109	.4561	.4078	.2906	.4525	.2092	.0848	.4479	.2707
#1	.0486	29.90	2.130	2.154	.0537	234.0	.0512	.5093	.2067	.2589
#2	.0488	29.77	2.138	2.137	.0535	232.1	.0511	.5090	.2083	.2603
#3	.0485	29.95	2.149	2.148	.0534	233.8	.0513	.5098	.2066	.2596

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	28.42	28.67	35.10	.5310	.5426	29.47	.5245	.5076	.5286	2.132
Stddev	.06	.16	.10	.0015	.0005	.13	.0017	.0020	.0011	.003
%RSD	.1942	.5490	.2894	.2865	.0851	.4272	.3212	.3915	.2037	.1503
#1	28.41	28.83	35.19	.5296	.5421	29.54	.5243	.5062	.5276	2.133
#2	28.37	28.52	34.99	.5326	.5425	29.32	.5229	.5068	.5286	2.129
#3	28.48	28.67	35.11	.5309	.5431	29.55	.5262	.5099	.5297	2.135

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.2141	.5507	.6731	.5483	2.026	.5033	.5103
Stddev	.0011	.0001	.0034	.0014	.002	.0010	.0006
%RSD	.5043	.0234	.5105	.2625	.0727	.2053	.1092
#1	.2149	.5506	.6748	.5499	2.025	.5043	.5104
#2	.2128	.5507	.6691	.5478	2.025	.5033	.5096
#3	.2144	.5508	.6754	.5472	2.027	.5022	.5107

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1860.6	5387.2	40717.	3433.7
Stddev	3.9	7.7	109.	19.9
%RSD	.21108	.14369	.26674	.57855
#1	1856.6	5378.7	40828.	3413.3
#2	1864.4	5394.0	40713.	3453.0
#3	1860.9	5388.8	40611.	3434.8

Zoom In Zoom Out

Sample Name: MP31552-S2 Acquired: 1/26/2017 15:37:06 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0476	29.48	2.103	2.128	.0527	231.0	.0504	.5015	.2029	.2558
Stddev	.0001	.04	.006	.004	.0001	.3	.0001	.0009	.0013	.0013
%RSD	.1235	.1464	.3002	.2008	.2633	.1310	.2133	.1750	.6215	.4904
#1	.0476	29.43	2.096	2.124	.0526	230.8	.0503	.5011	.2021	.2560
#2	.0476	29.52	2.105	2.132	.0529	231.3	.0505	.5025	.2044	.2545
#3	.0475	29.50	2.108	2.128	.0527	230.9	.0503	.5009	.2022	.2570

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	27.92	28.41	34.70	.5241	.5353	29.09	.5141	.5009	.5175	2.092
Stddev	.02	.04	.08	.0010	.0008	.03	.0004	.0006	.0026	.001
%RSD	.0591	.1333	.2344	.1908	.1561	.0948	.0691	.1254	.5054	.0349
#1	27.93	28.42	34.60	.5237	.5344	29.06	.5144	.5002	.5150	2.092
#2	27.90	28.45	34.75	.5233	.5360	29.12	.5141	.5014	.5173	2.092
#3	27.93	28.37	34.74	.5252	.5355	29.09	.5137	.5010	.5202	2.093

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.2072	.5424	.6652	.5390	1.997	.4959	.5025
Stddev	.0032	.0012	.0010	.0015	.004	.0023	.0008
%RSD	1.554	.2121	.1504	.2730	.2137	.4727	.1644
#1	.2065	.5412	.6641	.5374	1.995	.4946	.5021
#2	.2044	.5434	.6654	.5393	1.995	.4986	.5035
#3	.2108	.5428	.6661	.5403	2.002	.4945	.5020

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1862.6	5394.6	40773.	3428.2
Stddev	1.6	9.5	74.	9.2
%RSD	.08405	.17537	.18115	.26699
#1	1864.4	5397.1	40858.	3436.2
#2	1861.4	5384.2	40738.	3418.2
#3	1862.1	5402.6	40724.	3430.2

Zoom In Zoom Out

Sample Name: FA40605-1L Acquired: 1/26/2017 15:41:03 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0001	.0015	.0007	.0086	-.0001	91.33	.0000	.0001	.0005
Stddev	.0003	.0047	.0002	.0001	.0001	.47	.000	.0001	.0002
%RSD	327.9	315.9	29.94	1.459	100.9	.5122	187.8	90.67	36.74
#1	.0001	.0037	.0007	.0086	.0000	91.84	.0000	.0001	.0004
#2	.0004	.0046	.0008	.0085	-.0001	90.91	.0000	.0000	.0006
#3	-.0002	-.0039	.0004	.0088	-.0001	91.25	.0000	.0001	.0003

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0002	.0025	.2039	.7834	.0183	-.0015	F169.3	.0002	.0002
Stddev	.0003	.0020	.0237	.0070	.0000	.0000	1.0	.0001	.0002
%RSD	198.1	80.64	11.64	.8939	.0225	1.743	.5973	31.25	102.4
#1	-.0002	.0006	.1804	.7811	.0183	-.0015	170.5	.0002	.0005
#2	-.0004	.0047	.2034	.7913	.0183	-.0015	168.5	.0002	.0000
#3	.0002	.0023	.2279	.7779	.0183	-.0015	169.1	.0001	.0003

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0013	.0002	.0823	-.0003	.1585	.0003	.0003	.0011	.1021
Stddev	.0003	.0020	.0015	.0001	.0006	.0001	.0013	.0001	.0002
%RSD	22.98	867.4	1.842	35.41	.3620	41.25	496.2	5.522	.2152
#1	.0011	-.0012	.0837	-.0002	.1591	.0003	-.0008	.0011	.1023
#2	.0016	-.0007	.0824	-.0004	.1581	.0001	.0017	.0010	.1020
#3	.0011	.0026	.0807	-.0004	.1582	.0004	-.0001	.0011	.1019

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1905.5	5356.2	40580.	3391.8
Stddev	2.4	8.8	107.	25.4
%RSD	.12353	.16368	.26282	.74971
#1	1902.8	5346.2	40603.	3365.7
#2	1907.3	5362.2	40464.	3393.1
#3	1906.5	5360.4	40673.	3416.5

Zoom In Zoom Out

Sample Name: FA40605-2L Acquired: 1/26/2017 15:45:14 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0000	.0069	-.0002	.0072	-.0001	2.875	-.0001	.0000	.0005
Stddev	.001	.0183	.0004	.0002	.0001	.009	.0000	.000	.0001
%RSD	9601.	263.1	261.0	2.593	117.9	.2979	54.81	243.2	13.19
#1	.0005	.0158	-.0006	.0073	-.0002	2.873	.0000	.0000	.0005
#2	-.0006	.0191	.0001	.0073	-.0001	2.885	-.0001	.0000	.0006
#3	.0001	-.0140	.0001	.0070	.0000	2.868	-.0001	-.0001	.0005

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0002	.0059	.1724	.1031	.0042	-.0013	F163.0	.0001	.0005
Stddev	.0002	.0036	.0502	.0249	.0001	.0000	.3	.0001	.0005
%RSD	101.7	60.23	29.13	24.15	1.862	1.268	.1642	230.5	102.2
#1	-.0003	.0032	.1152	.0867	.0043	-.0013	163.1	.0000	-.0001
#2	.0000	.0100	.2091	.0909	.0041	-.0013	163.2	.0000	.0006
#3	-.0004	.0047	.1930	.1318	.0041	-.0012	162.7	.0002	.0008

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0002	.0003	.0427	-.0003	.0111	.0030	.0000	.0000	.2512
Stddev	.0008	.0012	.0022	.0002	.0001	.0001	.000	.0001	.0008
%RSD	352.6	373.2	5.215	64.81	.6705	1.779	359.7	630.0	.3121
#1	.0011	-.0002	.0401	-.0004	.0111	.0030	-.0001	-.0001	.2519
#2	.0000	.0018	.0436	-.0001	.0111	.0030	.0001	.0002	.2503
#3	-.0004	-.0005	.0443	-.0005	.0110	.0029	-.0001	.0000	.2513

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1942.3	5405.5	40797.	3425.4
Stddev	3.9	17.6	169.	4.4
%RSD	.19962	.32530	.41520	.12850
#1	1937.9	5388.5	40679.	3430.5
#2	1945.2	5423.6	40720.	3422.8
#3	1943.7	5404.4	40991.	3423.0

Zoom In Zoom Out

Sample Name: FA40605-3L Acquired: 1/26/2017 15:49:28 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0001	.0355	-.0001	.0124	-.0001	24.56	.0000	.0000	.0004
Stddev	.0004	.0117	.0003	.0002	.0000	.11	.0001	.000	.0002
%RSD	726.9	32.80	440.3	1.502	74.81	.4331	204.1	334.8	47.73
#1	.0001	.0456	.0003	.0125	.0000	24.67	.0001	-.0001	.0006
#2	-.0005	.0228	-.0003	.0122	.0000	24.54	.0000	.0000	.0005
#3	.0003	.0382	-.0003	.0124	-.0001	24.46	.0000	.0001	.0002

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0000	.0272	.2374	.5494	.0149	-.0018	F170.0	.0001	.0002
Stddev	.000	.0034	.0148	.0230	.0001	.0001	1.2	.0001	.0003
%RSD	515.8	12.62	6.238	4.177	.5462	7.239	.6785	134.8	140.6
#1	-.0002	.0310	.2203	.5661	.0148	-.0016	171.2	.0000	.0003
#2	.0002	.0243	.2449	.5233	.0150	-.0018	169.8	.0002	.0005
#3	-.0001	.0263	.2469	.5590	.0148	-.0019	168.9	.0000	-.0001

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0010	.0006	.0604	-.0002	.0666	.0021	-.0001	-.0001	.5656
Stddev	.0003	.0025	.0022	.0003	.0002	.0002	.0007	.0002	.0013
%RSD	29.31	447.4	3.579	121.3	.3182	7.447	607.2	286.1	.2278
#1	.0010	-.0009	.0625	-.0004	.0669	.0020	-.0008	.0002	.5648
#2	.0007	-.0009	.0603	-.0004	.0666	.0020	-.0001	-.0002	.5649
#3	.0013	.0035	.0582	.0001	.0664	.0023	.0006	-.0002	.5671

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1921.1	5412.0	40392.	3419.2
Stddev	5.6	1.9	23.	24.1
%RSD	.28904	.03532	.05782	.70511
#1	1919.0	5409.9	40399.	3392.3
#2	1927.4	5413.6	40412.	3426.6
#3	1916.9	5412.4	40367.	3438.8

Zoom In Zoom Out

Sample Name: FA40621-1 Acquired: 1/26/2017 15:53:40 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0002	.0017	-.0014	.0883	.0000	285.2	-.0002	-.0001	.5032	-.0007
Stddev	.0004	.0104	.0007	.0005	.000	3.5	.0001	.0001	.0004	.0003
%RSD	252.0	601.7	51.98	.5587	261.7	1.220	33.71	140.7	.0782	44.55
#1	-.0002	.0129	-.0006	.0877	.0000	281.6	-.0002	.0000	.5030	-.0006
#2	.0001	-.0076	-.0019	.0885	.0000	288.6	-.0001	-.0002	.5037	-.0011
#3	.0006	-.0001	-.0016	.0887	-.0001	285.2	-.0003	-.0001	.5031	-.0005

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	-.0051	21.36	.8697	.0005	.0143	40.73	-.0003	-.0002	.0042	.0017
Stddev	.0003	.07	.0217	.0000	.0002	.13	.0002	.0006	.0003	.0010
%RSD	5.293	.3110	2.493	2.298	1.217	.3232	52.25	384.1	7.873	55.48
#1	-.0048	21.31	.8607	.0005	.0141	40.58	-.0004	-.0009	.0046	.0014
#2	-.0053	21.43	.8540	.0005	.0143	40.82	-.0004	.0002	.0040	.0009
#3	-.0053	21.32	.8945	.0005	.0145	40.79	-.0001	.0002	.0041	.0028

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.106	-.0005	.3956	.0002	-.0016	.0179	.0007
Stddev	.009	.0001	.0009	.0001	.0008	.0002	.0001
%RSD	.1769	26.43	.2288	49.01	49.70	1.012	13.35
#1	5.105	-.0005	.3949	.0001	-.0020	.0180	.0008
#2	5.115	-.0005	.3953	.0002	-.0007	.0177	.0008
#3	5.097	-.0003	.3966	.0004	-.0021	.0180	.0006

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1876.7	5250.3	39729.	3387.2
Stddev	4.1	10.0	50.	35.4
%RSD	.21991	.18967	.12560	1.0438
#1	1881.4	5259.4	39733.	3422.8
#2	1874.8	5251.9	39677.	3386.6
#3	1873.9	5239.7	39777.	3352.1

Zoom In Zoom Out

Sample Name: FA40621-2 Acquired: 1/26/2017 15:57:56 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	-.0144	-.0016	.1106	-.0001	257.5	-.0002	-.0002	.8818	-.0007
Stddev	.0004	.0087	.0004	.0005	.0000	.5	.0000	.0001	.0015	.0001
%RSD	401.7	60.33	26.68	.4838	31.03	.1842	20.27	60.32	.1738	16.90
#1	.0005	-.0233	-.0015	.1109	-.0001	257.5	-.0003	-.0002	.8835	-.0008
#2	-.0003	-.0139	-.0020	.1109	-.0001	258.0	-.0003	-.0001	.8816	-.0006
#3	.0001	-.0060	-.0012	.1099	-.0001	257.0	-.0002	-.0004	.8804	-.0008

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	-.0075	6.734	.1150	.0000	.0264	15.65	-.0003	.0008	.0039	.0010
Stddev	.0002	.020	.0256	.000	.0001	.04	.0003	.0007	.0010	.0007
%RSD	3.188	.3003	22.27	76.14	.2886	.2701	130.3	91.67	25.82	63.29
#1	-.0075	6.714	.0880	.0000	.0265	15.68	.0001	.0012	.0045	.0006
#2	-.0077	6.734	.1181	.0000	.0263	15.67	-.0003	.0013	.0028	.0018
#3	-.0072	6.755	.1389	.0000	.0264	15.60	-.0006	.0000	.0045	.0007

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.357	-.0001	.3641	.0003	-.0006	.0128	.0032
Stddev	.008	.0001	.0013	.0002	.0003	.0003	.0000
%RSD	.3563	61.13	.3512	97.86	58.64	2.605	1.388
#1	2.349	-.0001	.3650	.0004	-.0004	.0132	.0032
#2	2.356	-.0001	.3646	.0000	-.0010	.0125	.0032
#3	2.366	-.0002	.3627	.0004	-.0004	.0128	.0032

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1914.3	5298.2	40313.	3383.4
Stddev	6.3	2.9	5.	11.5
%RSD	.32808	.05404	.01296	.33877
#1	1909.2	5296.9	40309.	3396.4
#2	1912.4	5301.5	40319.	3374.7
#3	1921.3	5296.2	40310.	3379.1

Zoom In Zoom Out

Sample Name: FA40568-1 Acquired: 1/26/2017 16:02:07 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	1.565	-.0005	.4203	.0000	230.7	-.0002	.0001	.0042	.0183
Stddev	.0004	.019	.0005	.0016	.000	.9	.0000	.0001	.0000	.0005
%RSD	1297.	1.202	105.2	.3816	124.3	.3818	12.81	57.90	.6483	2.606
#1	-.0004	1.574	-.0010	.4185	.0000	229.7	-.0002	.0001	.0043	.0184
#2	.0002	1.577	-.0001	.4207	-.0001	231.2	-.0002	.0000	.0043	.0178
#3	.0003	1.543	-.0002	.4216	-.0001	231.3	-.0002	.0001	.0042	.0188

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	-.0031	27.80	.0133	.0001	.0078	63.64	.0000	.0003	.0035	-.0009
Stddev	.0009	.11	.0061	.0001	.0001	.23	.000	.0003	.0002	.0006
%RSD	27.35	.3831	45.79	80.21	.7592	.3547	2279.	110.3	6.512	67.98
#1	-.0026	27.68	.0167	.0001	.0078	63.44	.0000	-.0001	.0033	-.0010
#2	-.0027	27.85	.0170	.0000	.0078	63.88	.0000	.0003	.0035	-.0002
#3	-.0041	27.87	.0063	.0001	.0079	63.59	.0000	.0005	.0038	-.0014

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0891	-.0002	.5409	.0002	-.0017	.0002	.0014
Stddev	.0037	.0002	.0015	.0002	.0009	.0002	.0000
%RSD	4.122	110.3	.2720	77.71	53.01	92.39	1.768
#1	.0885	.0000	.5394	.0003	-.0028	.0002	.0014
#2	.0857	-.0003	.5424	.0003	-.0011	.0004	.0015
#3	.0930	-.0002	.5410	.0000	-.0013	.0000	.0014

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1879.3	5314.7	40292.	3413.1
Stddev	3.8	10.2	32.	24.4
%RSD	.20302	.19270	.08023	.71447
#1	1883.7	5324.5	40303.	3441.2
#2	1877.7	5315.6	40318.	3401.1
#3	1876.6	5304.1	40256.	3397.0

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/26/2017 16:06:17 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2568	38.96	1.972	1.981	1.961	39.04	1.987	1.977	1.982	1.949
Stddev	.0017	.14	.002	.011	.013	.19	.002	.003	.004	.005
%RSD	.6650	.3640	.0997	.5424	.6659	.4865	.1116	.1537	.1759	.2586
#1	.2587	39.01	1.974	1.986	1.967	39.11	1.989	1.980	1.983	1.954
#2	.2553	39.07	1.971	1.988	1.970	39.18	1.987	1.977	1.985	1.945
#3	.2564	38.80	1.970	1.969	1.946	38.82	1.984	1.974	1.978	1.947

Check ? Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	38.95	39.42	39.05	1.997	2.027	39.20	1.997	1.948	1.936	1.979
Stddev	.20	.15	.18	.006	.001	.20	.002	.002	.005	.006
%RSD	.5177	.3683	.4721	.2861	.0621	.5169	.0922	.1132	.2410	.3032
#1	39.05	39.56	39.07	1.993	2.028	39.29	1.999	1.948	1.937	1.978
#2	39.08	39.43	39.23	2.003	2.028	39.34	1.997	1.945	1.940	1.973
#3	38.72	39.27	38.86	1.993	2.026	38.96	1.996	1.950	1.931	1.985

Check ? Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.496	2.069	2.042	2.068	1.958	2.057	1.988
Stddev	.008	.005	.009	.010	.006	.001	.004
%RSD	.3198	.2367	.4582	.4786	.2843	.0487	.2142
#1	2.504	2.073	2.046	2.080	1.962	2.058	1.991
#2	2.495	2.069	2.048	2.064	1.951	2.056	1.989
#3	2.488	2.063	2.031	2.062	1.959	2.057	1.983

Check ? None Chk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/26/2017 16:06:17 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1875.2	5397.6	40568.	3373.4
Stddev	2.3	10.9	153.	26.4
%RSD	.12497	.20207	.37694	.78191
#1	1874.9	5392.4	40683.	3396.5
#2	1877.7	5390.3	40395.	3344.6
#3	1873.1	5410.1	40627.	3379.0

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/26/2017 16:10:12 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0058	.0000	.0003	.0000	.0016	.0000	.0000	.0002	.0002
Stddev	.0003	.0071	.0005	.0000	.000	.0015	.000	.000	.0001	.0002
%RSD	172.8	122.1	1547.	5.420	737.3	91.64	140.0	352.1	45.46	90.01
#1	-.0001	.0115	-.0004	.0003	.0001	.0021	.0000	.0000	.0003	.0001
#2	.0002	-.0021	.0005	.0003	-.0002	-.0001	.0000	.0001	.0001	.0004
#3	.0004	.0079	.0000	.0003	.0001	.0027	.0000	-.0002	.0002	.0001

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
High Limit
Low Limit

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0078	-.0505	.0226	.0000	.0004	.0444	.0000	.0007	.0008	-.0004
Stddev	.0073	.0216	.0165	.000	.0004	.0009	.000	.0005	.0004	.0008
%RSD	92.97	42.84	73.17	56.68	116.0	2.135	312.1	74.09	46.13	222.7
#1	.0151	-.0511	.0069	-.0001	.0008	.0433	-.0001	.0012	.0011	.0005
#2	.0077	-.0717	.0398	.0000	.0003	.0450	-.0001	.0008	.0010	-.0010
#3	.0006	-.0285	.0209	.0000	.0000	.0449	.0001	.0001	.0004	-.0005

Check ? Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
High Limit
Low Limit

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	-.0002	.0001	.0000	.0002	.0000	.0001
Stddev	.0004	.0002	.0001	.0000	.0015	.000	.0001
%RSD	79.94	115.0	76.71	124.5	765.9	9829.	102.5
#1	.0004	-.0002	.0000	.0001	-.0008	.0000	.0001
#2	.0008	.0000	.0001	.0001	.0019	.0004	.0000
#3	.0001	-.0003	.0001	.0000	-.0005	-.0004	.0000

Check ? None Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass
High Limit
Low Limit

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/26/2017 16:10:12 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2090.7	5632.2	42551.	3415.6
Stddev	5.4	16.2	212.	15.7
%RSD	.25972	.28826	.49779	.46102
#1	2090.5	5648.0	42711.	3397.8
#2	2096.2	5633.1	42631.	3421.3
#3	2085.4	5615.5	42311.	3427.6

Zoom In Zoom Out

Sample Name: FA40613-2 Acquired: 1/26/2017 16:14:28 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	-.0095	-.0006	.0129	-.0001	7.920	-.0001	-.0001	.0001	.0006
Stddev	.000	.0050	.0006	.0001	.0001	.030	.0000	.0001	.0003	.0002
%RSD	703.7	52.82	104.1	1.069	92.53	.3798	51.46	112.4	243.6	44.08
#1	-.0001	-.0038	-.0008	.0128	-.0003	7.889	-.0001	-.0001	.0003	.0007
#2	.0003	-.0116	-.0012	.0130	-.0001	7.923	-.0001	-.0001	-.0002	.0003
#3	-.0003	-.0133	.0001	.0128	-.0001	7.949	.0000	.0000	.0002	.0007

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	-.0043	2.233	2.782	.0012	.0030	3.591	.0001	-.0004	.0009	.0013
Stddev	.0065	.043	.010	.0000	.0001	.015	.0002	.0003	.0012	.0003
%RSD	151.5	1.911	.3664	2.126	4.203	.4221	319.8	71.89	127.5	20.10
#1	.0001	2.242	2.780	.0012	.0031	3.574	.0001	-.0002	-.0003	.0012
#2	-.0012	2.271	2.773	.0012	.0029	3.603	.0002	-.0006	.0020	.0012
#3	-.0117	2.187	2.793	.0012	.0031	3.597	-.0002	-.0003	.0011	.0016

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.8834	-.0002	.0173	.0000	.0000	.0002	.0014
Stddev	.0019	.0003	.0001	.000	.0003	.0002	.0000
%RSD	.2165	137.1	.3549	158.2	657.9	103.6	2.178
#1	.8812	-.0003	.0172	.0000	-.0002	.0003	.0014
#2	.8847	-.0005	.0172	.0000	.0004	.0002	.0014
#3	.8844	.0001	.0173	-.0001	-.0001	.0000	.0014

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2081.1	5633.6	42698.	3458.5
Stddev	1.9	4.3	115.	23.5
%RSD	.08931	.07620	.27040	.67907
#1	2082.3	5636.8	42565.	3472.4
#2	2079.0	5635.4	42769.	3471.6
#3	2082.1	5628.7	42761.	3431.3

Zoom In Zoom Out

Sample Name: FA40503-1 Acquired: 1/26/2017 16:18:42 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	.6914	-.0010	.0585	-.0001	220.0	-.0001	.0000	.0062	.0108
Stddev	.0002	.0144	.0002	.0008	.0001	.5	.0000	.000	.0001	.0003
%RSD	166.9	2.082	20.23	1.375	76.24	.2071	27.30	211.8	1.359	2.358
#1	-.0001	.6932	-.0012	.0594	-.0001	220.4	-.0001	.0000	.0062	.0106
#2	.0001	.7048	-.0011	.0579	-.0001	220.0	-.0002	.0000	.0063	.0111
#3	.0003	.6762	-.0008	.0581	.0000	219.5	-.0001	-.0001	.0062	.0107

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	-.0034	7.973	3.791	.0036	.0057	22.40	.0002	.0003	.0111	.0001
Stddev	.0028	.065	.014	.0001	.0001	.06	.0002	.0001	.0009	.0006
%RSD	83.40	.8175	.3697	1.455	1.265	.2753	94.65	48.35	8.043	743.6
#1	-.0049	8.004	3.787	.0036	.0056	22.47	.0000	.0003	.0103	.0008
#2	-.0051	7.898	3.806	.0035	.0057	22.35	.0004	.0001	.0120	-.0002
#3	-.0001	8.018	3.779	.0036	.0057	22.39	.0004	.0003	.0109	-.0003

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0222	.0000	.2879	.0003	-.0009	.0005	.0025
Stddev	.0004	.000	.0010	.0001	.0007	.0001	.0000
%RSD	1.820	4677.	.3483	45.41	84.63	17.08	1.827
#1	.0227	-.0001	.2890	.0002	-.0008	.0005	.0025
#2	.0220	.0000	.2870	.0005	-.0002	.0004	.0024
#3	.0219	.0001	.2877	.0002	-.0016	.0004	.0025

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1911.4	5379.6	40486.	3402.9
Stddev	2.4	5.5	251.	23.9
%RSD	.12512	.10210	.61892	.70313
#1	1914.0	5385.0	40746.	3414.3
#2	1910.8	5374.0	40468.	3375.4
#3	1909.3	5379.9	40246.	3419.0

Zoom In Zoom Out

Sample Name: MP31552-D2 Acquired: 1/26/2017 16:22:55 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.9532	-.0006	.0599	-.0001	224.8	-.0002	.0000	.0064	.0118
Stddev	.0002	.0058	.0001	.0004	.0001	1.3	.0000	.0001	.0000	.0003
%RSD	1241.	.6060	20.23	.7242	50.76	.5859	11.18	241.2	.5419	2.334
#1	-.0003	.9524	-.0005	.0596	-.0002	224.7	-.0002	.0001	.0064	.0116
#2	.0001	.9594	-.0005	.0604	-.0001	226.1	-.0002	.0000	.0064	.0121
#3	.0002	.9479	-.0007	.0597	-.0001	223.5	-.0002	.0000	.0063	.0117

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	-.0053	8.424	3.857	.0038	.0057	22.87	.0002	.0003	.0097	.0009
Stddev	.0009	.013	.028	.0000	.0000	.13	.0002	.0005	.0013	.0015
%RSD	17.24	.1498	.7353	1.128	.6670	.5531	100.4	172.0	13.43	162.8
#1	-.0043	8.410	3.851	.0038	.0056	22.87	.0004	.0000	.0086	.0010
#2	-.0058	8.430	3.887	.0038	.0057	23.00	.0001	.0000	.0093	-.0006
#3	-.0060	8.433	3.832	.0039	.0057	22.75	.0001	.0008	.0112	.0025

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0169	-.0002	.2943	.0003	-.0011	.0005	.0004
Stddev	.0003	.0001	.0017	.0001	.0006	.0001	.0001
%RSD	1.760	32.19	.5827	46.44	55.17	24.78	22.84
#1	.0172	-.0002	.2934	.0004	-.0010	.0006	.0003
#2	.0169	-.0003	.2963	.0002	-.0018	.0006	.0004
#3	.0166	-.0002	.2932	.0002	-.0006	.0004	.0004

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1909.7	5388.9	40435.	3380.1
Stddev	1.1	3.7	206.	27.8
%RSD	.05505	.06956	.50967	.82286
#1	1910.6	5390.3	40246.	3362.5
#2	1908.6	5384.7	40404.	3365.5
#3	1910.0	5391.8	40655.	3412.1

Zoom In Zoom Out

Sample Name: MP31552-D3 Acquired: 1/26/2017 16:27:08 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0002	-.0052	-.0013	.0860	-.0001	290.6	-.0002	-.0002	.5048	-.0009
Stddev	.0005	.0070	.0004	.0001	.0000	.8	.0000	.0001	.0007	.0001
%RSD	202.4	132.9	29.51	.1520	10.59	.2736	17.21	28.78	.1451	7.722
#1	.0000	-.0032	-.0009	.0861	-.0001	291.3	-.0002	-.0002	.5054	-.0008
#2	.0008	-.0130	-.0017	.0858	-.0001	289.8	-.0003	-.0001	.5040	-.0009
#3	-.0001	.0005	-.0015	.0860	-.0001	290.7	-.0003	-.0002	.5049	-.0009

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	-.0065	21.82	.8629	.0005	.0145	40.83	-.0004	.0006	.0040	.0003
Stddev	.0013	.08	.0344	.0000	.0001	.10	.0002	.0001	.0003	.0008
%RSD	19.33	.3492	3.990	3.011	.8937	.2544	57.71	22.75	8.150	293.5
#1	-.0054	21.88	.9008	.0005	.0145	40.90	-.0006	.0007	.0042	.0004
#2	-.0062	21.74	.8541	.0005	.0143	40.71	-.0003	.0004	.0041	-.0006
#3	-.0078	21.85	.8337	.0005	.0146	40.88	-.0002	.0006	.0036	.0009

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.150	-.0003	.4007	.0002	-.0005	.0177	-.0002
Stddev	.009	.0004	.0009	.0002	.0012	.0001	.0000
%RSD	.1781	151.1	.2288	98.65	232.3	.5021	12.22
#1	5.154	-.0005	.4018	.0004	-.0001	.0176	-.0002
#2	5.139	-.0006	.4000	.0002	-.0019	.0177	-.0003
#3	5.156	.0002	.4005	.0000	.0004	.0178	-.0002

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1871.8	5269.2	39662.	3359.0
Stddev	2.6	10.0	162.	21.9
%RSD	.13664	.19060	.40898	.65058
#1	1869.0	5269.6	39510.	3337.1
#2	1874.1	5279.1	39833.	3380.9
#3	1872.1	5259.0	39644.	3359.1

Zoom In Zoom Out

Sample Name: MP31552-MB2 Acquired: 1/26/2017 16:31:20 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	-.0055	-.0003	.0008	-.0001	.0405	-.0001	-.0001	.0004
Stddev	.0001	.0062	.0003	.0003	.0001	.0030	.0000	.0000	.0002
%RSD	27.36	113.3	89.59	30.91	50.28	7.287	35.58	50.78	35.94
#1	.0003	-.0057	-.0007	.0006	-.0002	.0438	-.0001	-.0001	.0003
#2	.0002	-.0117	-.0002	.0011	-.0001	.0381	-.0001	-.0001	.0006
#3	.0002	.0008	-.0001	.0009	-.0001	.0397	-.0001	.0000	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	-.0039	.1302	.0104	.0000	-.0013	F173.9	-.0001	.0006
Stddev	.0001	.0026	.0378	.0168	.0000	.0001	.4	.0001	.0003
%RSD	30.35	67.44	29.01	161.5	51.11	8.175	.2297	112.9	49.15
#1	.0002	-.0021	.0873	.0187	.0000	-.0012	173.8	-.0002	.0005
#2	.0003	-.0026	.1583	.0214	.0000	-.0013	174.3	.0000	.0010
#3	.0004	-.0068	.1449	-.0089	.0000	-.0014	173.5	-.0001	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							2.500		
Low Limit							-2.500		

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0013	.0006	.0068	.0000	.0000	-.0004	-.0009	-.0001	.0041
Stddev	.0009	.0013	.0025	.000	.0001	.0000	.0009	.0002	.0000
%RSD	72.64	233.0	36.94	11300.	635.1	8.016	95.83	279.9	.1844
#1	.0021	-.0004	.0096	-.0001	.0001	-.0004	-.0011	-.0004	.0042
#2	.0003	.0021	.0049	.0000	.0000	-.0004	-.0017	.0000	.0041
#3	.0015	.0000	.0058	.0001	-.0001	-.0003	.0000	.0001	.0042
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: MP31552-MB2 Acquired: 1/26/2017 16:31:20 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1930.3	5453.8	40317.	3397.2
Stddev	1.7	4.6	229.	36.0
%RSD	.09035	.08461	.56917	1.0611
#1	1932.2	5459.1	40100.	3427.1
#2	1929.9	5451.0	40293.	3357.2
#3	1928.8	5451.2	40557.	3407.3

Zoom In Zoom Out

Sample Name: MP31552-B2 Acquired: 1/26/2017 16:35:35 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0471	29.34	2.048	2.079	.0525	27.45	.0507	.5008	.2047
Stddev	.0000	.04	.005	.003	.0001	.04	.0000	.0014	.0007
%RSD	.0356	.1341	.2370	.1194	.2326	.1303	.0601	.2824	.3253
#1	.0471	29.37	2.051	2.080	.0527	27.49	.0507	.5007	.2050
#2	.0471	29.29	2.042	2.076	.0524	27.42	.0507	.4995	.2039
#3	.0471	29.34	2.050	2.080	.0526	27.45	.0508	.5023	.2052
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2579	28.47	28.08	26.51	.5212	.5331	F188.1	.5048	.5078
Stddev	.0004	.13	.03	.08	.0009	.0002	2.1	.0011	.0017
%RSD	.1691	.4401	.1043	.2935	.1762	.0442	1.097	.2179	.3442
#1	.2582	28.61	28.09	26.60	.5221	.5328	189.1	.5059	.5068
#2	.2580	28.37	28.11	26.45	.5203	.5332	185.7	.5037	.5068
#3	.2574	28.42	28.05	26.48	.5211	.5332	189.5	.5048	.5098
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value							25.00		
Range							20.00%		

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5135	2.051	.0603	.5366	.5400	.5425	2.006	.4887	.5209
Stddev	.0013	.004	.0004	.0005	.0004	.0009	.003	.0006	.0006
%RSD	.2588	.2034	.6896	.1002	.0758	.1627	.1661	.1133	.1202
#1	.5133	2.052	.0598	.5372	.5403	.5434	2.003	.4887	.5205
#2	.5149	2.046	.0605	.5361	.5395	.5416	2.007	.4881	.5206
#3	.5123	2.054	.0605	.5365	.5401	.5424	2.010	.4892	.5216
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

SGS ACCUTEST FA40657

Zoom In Zoom Out

Sample Name: MP31552-B2 Acquired: 1/26/2017 16:35:35 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1857.8	5442.3	40319.	3385.4
Stddev	1.6	9.5	245.	4.1
%RSD	.08695	.17471	.60680	.12164
#1	1856.2	5431.4	40123.	3382.8
#2	1857.9	5446.5	40593.	3390.2
#3	1859.4	5448.9	40240.	3383.4

Zoom In Zoom Out

Sample Name: MP31552-MB3 Acquired: 1/26/2017 16:39:43 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0032	.0001	.0022	-.0001	.1400	-.0001	-.0001	.0001	-.0002
Stddev	.000	.0118	.0007	.0001	.0000	.0015	.0000	.0001	.0001	.0003
%RSD	442.7	371.0	641.8	6.186	91.71	1.100	44.64	134.7	54.19	120.6
#1	-.0002	.0122	.0006	.0021	-.0001	.1387	-.0001	-.0001	.0002	-.0002
#2	-.0001	-.0102	-.0006	.0022	-.0001	.1417	-.0001	-.0001	.0001	-.0005
#3	.0002	.0075	.0004	.0024	.0000	.1395	.0000	.0000	.0002	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0032	.0117	.0031	.0001	-.0009	.5361	.0000	.0005	.0004	.0005
Stddev	.0051	.0307	.0081	.0000	.0003	.0103	.000	.0005	.0007	.0024
%RSD	161.3	261.8	259.9	21.19	29.85	1.920	394.5	94.40	171.4	499.0
#1	.0059	.0252	.0124	.0001	-.0007	.5428	-.0001	.0008	.0009	.0031
#2	.0063	.0333	-.0006	.0001	-.0008	.5413	-.0002	.0007	-.0004	-.0001
#3	-.0027	-.0234	-.0025	.0001	-.0012	.5243	.0001	.0000	.0009	-.0016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0201	-.0002	.0002	-.0003	.0002	.0000	.0075
Stddev	.0054	.0002	.0000	.0001	.0005	.000	.0000
%RSD	27.07	134.4	27.79	23.40	320.6	520.8	.3770
#1	.0195	-.0003	.0002	-.0004	.0006	.0001	.0075
#2	.0150	.0001	.0001	-.0003	.0002	-.0002	.0074
#3	.0258	-.0003	.0002	-.0003	-.0004	.0000	.0075
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP31552-MB3 Acquired: 1/26/2017 16:39:43 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2094.8	5669.7	42933.	3446.7
Stddev	2.9	9.3	337.	6.5
%RSD	.13793	.16405	.78522	.18825
#1	2098.1	5680.0	42881.	3440.1
#2	2092.9	5667.2	43293.	3453.1
#3	2093.3	5661.9	42625.	3446.8

Zoom In Zoom Out

Sample Name: MP31552-B3 Acquired: 1/26/2017 16:43:59 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0482	30.03	2.077	2.132	.0539	28.33	.0523	.5199	.2104	.2659
Stddev	.0002	.10	.009	.004	.0003	.09	.0002	.0009	.0006	.0007
%RSD	.3147	.3271	.4350	.1836	.5129	.3019	.3591	.1646	.2921	.2758
#1	.0482	29.95	2.067	2.134	.0537	28.29	.0521	.5191	.2107	.2665
#2	.0484	30.14	2.080	2.134	.0539	28.43	.0523	.5198	.2108	.2651
#3	.0481	30.00	2.084	2.127	.0542	28.27	.0525	.5208	.2097	.2661
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	29.31	28.00	27.32	.5365	.5509	28.44	.5246	.5140	.5272	2.078
Stddev	.11	.07	.23	.0006	.0008	.13	.0016	.0002	.0003	.006
%RSD	.3761	.2531	.8507	.1112	.1469	.4619	.2981	.0441	.0547	.2834
#1	29.24	27.99	27.18	.5367	.5502	28.39	.5229	.5142	.5275	2.071
#2	29.43	28.08	27.59	.5369	.5507	28.59	.5248	.5137	.5270	2.081
#3	29.25	27.94	27.20	.5358	.5518	28.34	.5260	.5140	.5271	2.082
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0749	.5561	.5562	.5624	2.074	.5013	.5337
Stddev	.0035	.0012	.0005	.0010	.005	.0013	.0008
%RSD	4.644	.2244	.0867	.1821	.2484	.2661	.1415
#1	.0762	.5550	.5560	.5619	2.079	.4999	.5331
#2	.0709	.5559	.5568	.5636	2.075	.5025	.5333
#3	.0775	.5574	.5559	.5618	2.068	.5015	.5345
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

SGS ACCUTEST FA40657

Zoom In Zoom Out

Sample Name: MP31552-B3 Acquired: 1/26/2017 16:43:59 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1948.1	5551.5	41570.	3421.4
Stddev	2.9	8.0	139.	26.4
%RSD	.15051	.14494	.33410	.77025
#1	1946.7	5560.1	41639.	3437.5
#2	1946.2	5550.1	41410.	3391.0
#3	1951.5	5544.2	41661.	3435.7

Zoom In Zoom Out

Sample Name: MP31552-MB4 Acquired: 1/26/2017 16:47:58 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	-.0014	.0004	.0051	-.0001	.2304	.0004	.0000	.0001
Stddev	.0003	.0065	.0005	.0002	.0001	.0034	.0000	.000	.0003
%RSD	168.4	466.4	143.8	3.415	156.2	1.459	8.132	268.9	197.1
#1	.0003	.0047	-.0002	.0050	-.0003	.2317	.0003	.0000	-.0002
#2	-.0001	-.0007	.0005	.0051	.0000	.2266	.0004	-.0001	.0002
#3	.0003	-.0082	.0008	.0053	.0000	.2329	.0004	.0000	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0014	.0698	.0173	.0204	.0056	-.0008	1.386	-.0001	.0016
Stddev	.0004	.0014	.0139	.0146	.0000	.0001	.009	.0001	.0003
%RSD	26.16	1.950	80.43	71.65	.7950	15.96	.6678	105.4	17.42
#1	.0017	.0714	.0018	.0073	.0056	-.0007	1.389	.0000	.0016
#2	.0010	.0687	.0286	.0177	.0056	-.0008	1.375	-.0001	.0019
#3	.0015	.0694	.0215	.0362	.0056	-.0010	1.393	-.0002	.0014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0019	.0270	.0002	.0003	-.0001	.0003	.0001	F.0480
Stddev	.0007	.0011	.0049	.0002	.0001	.0000	.0009	.0001	.0002
%RSD	208.2	55.62	18.19	76.69	19.86	3.143	271.3	126.7	.3793
#1	-.0004	.0026	.0218	.0001	.0003	-.0001	.0008	.0001	.0478
#2	.0005	.0025	.0276	.0002	.0003	-.0001	.0009	.0000	.0482
#3	.0009	.0007	.0315	.0004	.0002	-.0001	-.0007	.0001	.0479
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit									.0100
Low Limit									-.0100

Zoom In Zoom Out

Sample Name: MP31552-MB4 Acquired: 1/26/2017 16:47:58 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2102.3	5676.8	42873.	3451.6
Stddev	3.3	2.2	229.	11.4
%RSD	.15460	.03954	.53472	.33046
#1	2105.1	5679.3	43021.	3460.6
#2	2103.2	5674.9	42990.	3438.8
#3	2098.7	5676.2	42609.	3455.5

Zoom In Zoom Out

Sample Name: MP31552-B4 Acquired: 1/26/2017 16:52:14 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0469	29.16	2.037	2.078	.0522	27.56	.0515	.5070	.2054	.2582
Stddev	.0003	.15	.001	.008	.0002	.16	.0001	.0009	.0011	.0009
%RSD	.7142	.5288	.0546	.4047	.4364	.5671	.1120	.1819	.5449	.3314
#1	.0472	29.32	2.039	2.088	.0524	27.74	.0515	.5067	.2059	.2592
#2	.0470	29.02	2.037	2.073	.0522	27.44	.0514	.5063	.2062	.2579
#3	.0466	29.13	2.037	2.074	.0519	27.50	.0516	.5081	.2042	.2576
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	28.39	27.37	26.63	.5267	.5337	28.51	.5127	.4999	.5162	2.038
Stddev	.12	.16	.12	.0029	.0008	.13	.0003	.0019	.0031	.008
%RSD	.4195	.5873	.4673	.5549	.1510	.4387	.0680	.3776	.5989	.3858
#1	28.46	27.53	26.77	.5299	.5328	28.64	.5123	.4977	.5145	2.046
#2	28.25	27.35	26.54	.5257	.5342	28.39	.5127	.5009	.5143	2.030
#3	28.46	27.21	26.59	.5243	.5341	28.50	.5130	.5012	.5198	2.038
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0816	.5408	.5361	.5400	2.011	.4882	.5588
Stddev	.0015	.0011	.0022	.0014	.005	.0015	.0012
%RSD	1.853	.2015	.4182	.2517	.2336	.3002	.2200
#1	.0800	.5398	.5378	.5399	2.007	.4884	.5580
#2	.0817	.5405	.5335	.5414	2.010	.4895	.5581
#3	.0830	.5420	.5368	.5387	2.016	.4866	.5602
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP31552-B4 Acquired: 1/26/2017 16:52:14 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1953.4	5543.5	41514.	3425.8
Stddev	1.7	8.0	401.	40.3
%RSD	.08775	.14373	.96516	1.1753
#1	1955.1	5547.8	41246.	3379.4
#2	1953.3	5548.4	41321.	3450.6
#3	1951.7	5534.3	41974.	3447.5

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/26/2017 16:56:11 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2565	38.65	1.949	1.963	1.951	38.66	1.975	1.968	1.979	1.952
Stddev	.0016	.12	.003	.005	.004	.14	.002	.001	.003	.007
%RSD	.6229	.3190	.1537	.2667	.2115	.3588	.1195	.0487	.1558	.3659
#1	.2552	38.53	1.945	1.957	1.946	38.56	1.973	1.967	1.980	1.950
#2	.2561	38.65	1.951	1.963	1.952	38.61	1.978	1.969	1.976	1.959
#3	.2583	38.78	1.950	1.968	1.954	38.82	1.976	1.968	1.982	1.946
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	38.70	38.95	38.30	1.998	2.027	39.14	1.970	1.948	1.941	1.949
Stddev	.16	.10	.12	.005	.004	.14	.002	.003	.002	.005
%RSD	.4070	.2489	.3254	.2349	.1825	.3505	.1048	.1310	.0962	.2682
#1	38.63	38.89	38.25	2.003	2.023	39.01	1.968	1.948	1.940	1.943
#2	38.59	38.90	38.21	1.997	2.030	39.14	1.972	1.950	1.943	1.950
#3	38.88	39.06	38.44	1.994	2.028	39.28	1.970	1.945	1.940	1.953
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.503	2.052	2.036	2.072	1.965	2.052	1.979
Stddev	.001	.003	.004	.004	.006	.002	.001
%RSD	.0210	.1546	.2132	.2157	.3030	.1025	.0392
#1	2.503	2.048	2.031	2.074	1.958	2.053	1.979
#2	2.503	2.054	2.036	2.075	1.968	2.050	1.979
#3	2.502	2.054	2.040	2.067	1.968	2.054	1.980
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/26/2017 16:56:11 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1881.9	5441.6	40525.	3377.3
Stddev	2.4	10.2	192.	36.5
%RSD	.12820	.18661	.47466	1.0804
#1	1884.5	5453.1	40384.	3414.8
#2	1879.7	5433.9	40744.	3375.0
#3	1881.4	5437.6	40446.	3342.0

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/26/2017 17:00:06 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	-.0019	.0005	.0002	.0000	.0003	.0000	.0000	.0000	.0000
Stddev	.0002	.0055	.0007	.0001	.0001	.0019	.0000	.000	.000	.000
%RSD	1646.	293.5	156.1	53.49	445.5	540.4	98.43	335.8	462.5	286.1
#1	-.0002	-.0043	.0012	.0002	.0001	.0014	.0000	.0001	-.0001	.0000
#2	.0000	.0044	.0005	.0001	.0000	.0014	.0001	.0000	.0001	.0000
#3	.0003	-.0057	-.0003	.0003	.0000	-.0018	.0000	-.0001	-.0001	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0039	-.0339	.0098	.0000	.0007	.0407	.0000	-.0001	.0000	.0009
Stddev	.0025	.0144	.0144	.0000	.0004	.0121	.0001	.0001	.0006	.0014
%RSD	63.70	42.45	146.3	380.2	59.66	29.59	417.2	95.41	1624.	152.3
#1	.0055	-.0199	-.0065	.0000	.0011	.0503	-.0001	.0000	-.0005	.0011
#2	.0010	-.0332	.0207	.0000	.0007	.0272	.0000	-.0001	.0008	.0023
#3	.0053	-.0486	.0152	.0000	.0003	.0448	.0001	-.0003	-.0002	-.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0007	.0000	.0000	.0000	.0005	-.0001	.0000
Stddev	.0002	.0002	.000	.0001	.0003	.0001	.0001
%RSD	26.17	948.4	153.9	244.6	66.39	165.7	143.4
#1	.0009	-.0002	.0000	.0002	.0006	-.0001	.0001
#2	.0008	.0001	.0000	-.0001	.0001	-.0001	.0000
#3	.0005	.0001	-.0001	.0000	.0007	.0001	.0000
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/26/2017 17:00:06 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2085.0	5617.3	42764.	3381.6
Stddev	2.0	6.2	127.	4.5
%RSD	.09522	.11096	.29694	.13315
#1	2082.8	5624.5	42626.	3376.7
#2	2086.5	5614.0	42875.	3382.7
#3	2085.8	5613.4	42792.	3385.5

Zoom In Zoom Out

Sample Name: MP31552-MB5 Acquired: 1/26/2017 17:04:21 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	-.0055	.0003	.0002	-.0001	.0073	-.0001	-.0001	.0002	-.0002
Stddev	.0002	.0104	.0010	.0001	.0000	.0011	.0000	.0000	.0001	.0002
%RSD	112.4	189.6	358.5	67.41	39.65	14.69	72.08	8.393	41.88	138.2
#1	.0001	-.0087	.0014	.0002	-.0002	.0063	.0000	-.0001	.0001	-.0001
#2	.0004	.0061	-.0004	.0003	-.0001	.0073	-.0001	-.0001	.0002	.0000
#3	.0000	-.0139	-.0002	.0000	-.0001	.0084	-.0001	-.0001	.0002	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0055	-.0406	.0060	-.0001	-.0007	.0597	.0001	.0002	.0013	.0012
Stddev	.0007	.0121	.0096	.0000	.0001	.0075	.0001	.0002	.0010	.0016
%RSD	13.14	29.85	159.1	77.72	14.90	12.49	99.97	104.6	79.41	131.4
#1	-.0063	-.0507	-.0017	-.0001	-.0006	.0664	.0003	.0001	.0023	.0017
#2	-.0048	-.0440	.0030	.0000	-.0008	.0611	.0000	.0005	.0010	-.0006
#3	-.0054	-.0272	.0168	-.0001	-.0008	.0517	.0001	.0001	.0004	.0024
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0025	-.0004	.0001	-.0003	-.0004	.0000	.0006
Stddev	.0005	.0002	.0000	.0000	.0007	.000	.0001
%RSD	21.43	41.56	85.62	14.73	150.7	571.7	9.158
#1	.0019	-.0006	.0001	-.0003	.0003	-.0003	.0006
#2	.0028	-.0002	.0000	-.0003	-.0009	-.0001	.0006
#3	.0028	-.0006	.0001	-.0003	-.0008	.0002	.0007
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP31552-MB5 Acquired: 1/26/2017 17:04:21 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2119.7	5724.3	43357.	3458.2
Stddev	4.9	2.0	213.	17.5
%RSD	.23032	.03464	.49120	.50661
#1	2114.4	5724.9	43602.	3449.9
#2	2124.0	5725.9	43214.	3478.3
#3	2120.8	5722.1	43256.	3446.3

Zoom In Zoom Out

Sample Name: MP31552-B5 Acquired: 1/26/2017 17:08:37 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0481	29.84	2.080	2.129	.0536	28.07	.0523	.5199	.2106	.2624
Stddev	.0005	.10	.004	.007	.0001	.09	.0001	.0004	.0007	.0003
%RSD	1.030	.3470	.2036	.3316	.2634	.3053	.2492	.0711	.3167	.1177
#1	.0480	29.96	2.078	2.136	.0537	28.16	.0523	.5197	.2108	.2624
#2	.0477	29.81	2.077	2.130	.0536	28.05	.0522	.5198	.2098	.2627
#3	.0487	29.76	2.085	2.122	.0534	27.99	.0525	.5203	.2111	.2621
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	29.03	28.02	27.43	.5327	.5465	28.00	.5259	.5129	.5237	2.059
Stddev	.00	.05	.22	.0010	.0009	.08	.0010	.0019	.0006	.006
%RSD	.0162	.1805	.7861	.1899	.1589	.2903	.1869	.3698	.1188	.2768
#1	29.04	28.08	27.66	.5337	.5473	28.08	.5254	.5108	.5243	2.064
#2	29.03	28.00	27.40	.5317	.5456	27.99	.5252	.5135	.5231	2.053
#3	29.03	27.99	27.23	.5326	.5467	27.92	.5270	.5145	.5235	2.060
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0585	.5565	.5486	.5525	2.062	.5017	.5260
Stddev	.0004	.0011	.0005	.0007	.004	.0009	.0013
%RSD	.6875	.2056	.0891	.1217	.1867	.1848	.2547
#1	.0582	.5560	.5492	.5520	2.057	.5026	.5254
#2	.0590	.5557	.5482	.5532	2.064	.5007	.5251
#3	.0585	.5578	.5485	.5521	2.064	.5017	.5276
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

SGS ACCUTEST FA40657

Zoom In Zoom Out

Sample Name: MP31552-B5 Acquired: 1/26/2017 17:08:37 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1946.3	5530.0	41459.	3383.3
Stddev	3.4	11.6	91.	7.1
%RSD	.17236	.20954	.21882	.20904
#1	1950.0	5537.4	41379.	3376.5
#2	1945.3	5536.0	41557.	3382.8
#3	1943.5	5516.6	41441.	3390.7

Zoom In Zoom Out

Sample Name: MP31553-MB1 Acquired: 1/26/2017 17:12:37 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2107.4	5675.4	42926.	3441.9
Stddev	7.0	13.1	193.	9.3
%RSD	.33425	.23032	.45015	.27020
#1	2115.0	5689.5	42989.	3452.3
#2	2101.0	5673.0	43081.	3434.5
#3	2106.2	5663.6	42710.	3438.9

Zoom In Zoom Out

Sample Name: MP31553-MB1 Acquired: 1/26/2017 17:12:37 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0033	-.0002	.0004	-.0002	.0156	-.0001	-.0001	.0008	.0039
Stddev	.0003	.0063	.0002	.0004	.0001	.0029	.0000	.0001	.0002	.0003
%RSD	313.4	191.0	125.5	95.64	79.57	18.54	17.56	162.4	27.75	8.064
#1	-.0002	-.0022	-.0003	.0000	.0000	.0125	-.0001	-.0002	.0009	.0036
#2	.0000	.0101	-.0003	.0007	-.0003	.0183	-.0001	-.0001	.0006	.0039
#3	.0005	.0019	.0001	.0005	-.0002	.0159	-.0001	.0001	.0010	.0042
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0308	.0085	-.0044	.0005	-.0007	.0398	.0001	.0003	.0009	.0013
Stddev	.0023	.0421	.0203	.0001	.0003	.0072	.0001	.0008	.0007	.0006
%RSD	7.317	493.2	460.9	10.47	35.97	18.15	87.09	228.2	75.40	44.47
#1	.0291	.0570	.0116	.0005	-.0007	.0388	.0002	.0004	.0004	.0012
#2	.0300	-.0128	-.0272	.0005	-.0005	.0474	.0001	-.0005	.0017	.0008
#3	.0334	-.0186	.0024	.0006	-.0010	.0331	.0000	.0011	.0006	.0019
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0062	.0207	.0000	.0002	.0000	.0000	.0039
Stddev	.0006	.0002	.000	.0001	.000	.0001	.0001
%RSD	9.817	1.178	142.5	50.92	1481.	828.7	1.536
#1	.0056	.0204	-.0001	.0002	.0004	.0000	.0038
#2	.0068	.0209	.0000	.0001	-.0002	.0001	.0040
#3	.0063	.0207	.0000	.0003	-.0003	.0000	.0039
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP31553-B1 Acquired: 1/26/2017 17:16:52 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0491	30.07	2.123	2.179	.0544	28.25	.0532	.5290	.2146	.2662
Stddev	.0005	.09	.005	.006	.0002	.07	.0000	.0002	.0006	.0006
%RSD	1.066	.2993	.2490	.2714	.2896	.2609	.0721	.0401	.2575	.2344
#1	.0494	30.17	2.122	2.184	.0546	28.30	.0532	.5291	.2151	.2663
#2	.0484	29.99	2.118	2.180	.0542	28.17	.0532	.5288	.2140	.2667
#3	.0493	30.05	2.128	2.172	.0544	28.28	.0533	.5292	.2146	.2655
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	29.15	28.38	27.77	.5399	.5600	28.14	.5386	.5193	.5216	2.096
Stddev	.11	.04	.15	.0021	.0005	.06	.0007	.0012	.0011	.004
%RSD	.3682	.1536	.5419	.3848	.0838	.2306	.1284	.2247	.2075	.1748
#1	29.21	28.43	27.83	.5406	.5603	28.20	.5393	.5196	.5205	2.101
#2	29.03	28.34	27.60	.5415	.5595	28.07	.5387	.5180	.5227	2.094
#3	29.22	28.39	27.89	.5375	.5603	28.16	.5379	.5203	.5216	2.094
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0647	.5892	.5643	.5678	2.083	.5112	.5352
Stddev	.0011	.0007	.0013	.0030	.002	.0022	.0003
%RSD	1.629	.1119	.2240	.5199	.1012	.4343	.0652
#1	.0643	.5899	.5653	.5711	2.082	.5129	.5355
#2	.0638	.5886	.5629	.5654	2.082	.5087	.5348
#3	.0659	.5892	.5646	.5668	2.086	.5120	.5352
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

SGS ACCUTEST FA40657

Zoom In Zoom Out

Sample Name: MP31553-B1 Acquired: 1/26/2017 17:16:52 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1951.3	5538.1	41502.	3401.3
Stddev	3.6	6.9	218.	12.5
%RSD	.18653	.12471	.52490	.36781
#1	1951.1	5530.9	41366.	3392.3
#2	1955.1	5544.7	41753.	3415.6
#3	1947.8	5538.8	41386.	3395.9

Zoom In Zoom Out

Sample Name: FA40657-1 Acquired: 1/26/2017 17:20:50 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0036	171.9	.1417	2.199	.0395	354.1	.0082	.1006	.1793	.3804
Stddev	.0005	.5	.0002	.009	.0004	.8	.0003	.0002	.0004	.0012
%RSD	14.73	.2702	.1376	.4133	.9343	.2328	3.428	.2054	.2372	.3147
#1	.0037	172.4	.1419	2.209	.0392	354.9	.0083	.1004	.1796	.3798
#2	.0041	171.7	.1415	2.195	.0399	353.3	.0079	.1008	.1794	.3818
#3	.0031	171.6	.1417	2.192	.0393	354.2	.0084	.1007	.1788	.3797

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	350.9	55.69	106.7	8.292	.2446	2.208	.2040	.9864	.0098	.0412
Stddev	.9	.27	.6	.002	.0009	.048	.0006	.0030	.0016	.0039
%RSD	.2594	.4860	.5429	.0272	.3728	2.157	.2715	.3071	16.56	9.478
#1	350.7	55.95	106.9	8.289	.2457	2.176	.2042	.9890	.0107	.0374
#2	350.1	55.69	106.1	8.292	.2441	2.262	.2033	.9831	.0079	.0411
#3	351.9	55.41	107.2	8.294	.2442	2.184	.2043	.9872	.0107	.0452

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.564	.0461	.7197	5.523	.0124	.3856	2.642
Stddev	.002	.0003	.0026	.018	.0039	.0015	.005
%RSD	.1556	.7388	.3669	.3204	31.79	.3777	.1781
#1	1.563	.0464	.7226	5.510	.0103	.3843	2.647
#2	1.566	.0460	.7193	5.543	.0169	.3854	2.638
#3	1.562	.0458	.7173	5.516	.0099	.3872	2.641

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1944.7	7555.4	56246.	4687.5
Stddev	4.4	8.7	83.	42.3
%RSD	.22515	.11526	.14699	.90320
#1	1939.7	7550.7	56153.	4692.1
#2	1947.7	7565.5	56275.	4727.2
#3	1946.9	7550.1	56310.	4643.0

Zoom In Zoom Out

Sample Name: MP31553-D1 Acquired: 1/26/2017 17:24:54 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0026	124.7	.1215	1.584	.0269	253.4	.0057	.0754	.1358	.2410
Stddev	.0006	.6	.0014	.007	.0006	1.0	.0002	.0001	.0006	.0007
%RSD	22.73	.4815	1.192	.4330	2.075	.3823	2.671	.0931	.4430	.2989
#1	.0021	124.0	.1211	1.578	.0263	252.3	.0058	.0753	.1352	.2418
#2	.0032	125.0	.1231	1.592	.0273	254.2	.0057	.0755	.1359	.2406
#3	.0025	125.1	.1203	1.583	.0272	253.6	.0055	.0754	.1364	.2405

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	246.6	39.85	76.06	5.587	.0092	1.388	.1467	.6370	.0034	.0210
Stddev	.6	.23	.28	.003	.0002	.020	.0007	.0027	.0038	.0063
%RSD	.2306	.5815	.3718	.0601	1.957	1.421	.4788	.4228	113.0	29.99
#1	246.4	39.60	75.75	5.583	.0090	1.409	.1470	.6350	.0024	.0278
#2	246.1	40.06	76.11	5.587	.0092	1.370	.1472	.6359	.0076	.0154
#3	247.2	39.90	76.30	5.590	.0093	1.385	.1459	.6401	.0001	.0196

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.840	.0323	.5490	4.373	.0086	.2970	2.378
Stddev	.004	.0001	.0020	.013	.0014	.0012	.003
%RSD	.2234	.4630	.3700	.3041	16.26	.4205	.1312
#1	1.837	.0322	.5493	4.367	.0075	.2958	2.379
#2	1.845	.0323	.5508	4.364	.0081	.2969	2.375
#3	1.840	.0325	.5468	4.388	.0101	.2983	2.381

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1985.7	6766.0	50446.	4151.5
Stddev	5.3	12.2	192.	60.0
%RSD	.26636	.18045	.37961	1.4455
#1	1987.5	6757.7	50667.	4220.0
#2	1989.9	6780.1	50333.	4126.1
#3	1979.8	6760.3	50339.	4108.3

Zoom In Zoom Out

Sample Name: MP31553-SD1 Acquired: 1/26/2017 17:28:59 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 25.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	232.8	.1843	2.929	.0483	470.3	.0092	.1335	.2457	.4987
Stddev	.0016	1.0	.0068	.018	.0011	1.9	.0002	.0018	.0046	.0042
%RSD	3201.	.4408	3.701	.6016	2.215	.4064	1.694	1.330	1.879	.8339
#1	.0013	233.8	.1838	2.947	.0474	472.4	.0093	.1324	.2405	.4939
#2	.0004	232.7	.1778	2.927	.0495	469.7	.0090	.1325	.2494	.5012
#3	-.0019	231.8	.1914	2.912	.0479	468.7	.0093	.1355	.2471	.5011

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	472.9	72.34	142.0	11.09	.2950	2.810	.2748	1.001	.0083	.0498
Stddev	1.2	.35	.6	.03	.0024	.221	.0090	.016	.0085	.0692
%RSD	.2616	.4811	.4201	.2860	.8082	7.857	3.283	1.580	102.6	138.8
#1	474.2	72.52	142.6	11.06	.2935	2.702	.2790	1.018	.0038	.0995
#2	472.7	71.94	141.5	11.10	.2978	3.064	.2809	.9864	.0181	-.0292
#3	471.7	72.56	141.9	11.13	.2939	2.665	.2644	.9998	.0030	.0791

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	27.48	.0583	.9451	7.852	.0261	.5145	3.719
Stddev	.59	.0049	.0004	.032	.0049	.0056	.008
%RSD	2.148	8.372	.0475	.4022	18.87	1.091	.2127
#1	28.02	.0597	.9456	7.853	.0235	.5086	3.709
#2	27.56	.0529	.9451	7.882	.0230	.5198	3.724
#3	26.85	.0624	.9447	7.819	.0318	.5151	3.722

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2045.7	6065.9	45557.	3677.6
Stddev	5.2	10.9	303.	23.2
%RSD	.25290	.17898	.66609	.63151
#1	2045.0	6058.2	45897.	3653.1
#2	2041.0	6061.1	45461.	3680.2
#3	2051.2	6078.3	45313.	3699.4

SGS ACCUTEST FA40657

Zoom In Zoom Out

Sample Name: MP31553-PS1 Acquired: 1/26/2017 17:33:05 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0364	179.1	.2219	2.454	.0780	367.6	.0460	.1414	.2237	.4669
Stddev	.0012	.8	.0038	.011	.0004	2.1	.0002	.0006	.0002	.0009
%RSD	3.338	.4353	1.734	.4344	.5752	.5775	.4762	.4168	.0776	.2001
#1	.0378	179.9	.2182	2.463	.0785	369.7	.0459	.1413	.2236	.4667
#2	.0358	179.2	.2217	2.458	.0778	367.8	.0458	.1409	.2239	.4661
#3	.0356	178.3	.2259	2.442	.0777	365.4	.0462	.1420	.2237	.4679

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	364.3	64.96	113.8	8.409	.3271	9.514	.2873	1.091	.0832	.1043
Stddev	1.5	.27	.7	.027	.0009	.092	.0009	.005	.0041	.0025
%RSD	.4012	.4087	.6018	.3185	.2752	.9640	.3247	.5043	4.978	2.371
#1	365.5	65.20	114.5	8.391	.3268	9.606	.2876	1.097	.0833	.1057
#2	364.7	65.00	113.7	8.395	.3264	9.515	.2863	1.087	.0874	.1014
#3	362.6	64.67	113.1	8.439	.3281	9.422	.2881	1.089	.0791	.1056

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.623	.0841	.7717	5.744	.1056	.4328	2.913
Stddev	.004	.0001	.0032	.019	.0066	.0012	.001
%RSD	.2676	.1120	.4184	.3347	6.229	.2693	.0265
#1	1.618	.0840	.7749	5.764	.0993	.4339	2.913
#2	1.623	.0841	.7720	5.741	.1124	.4330	2.913
#3	1.627	.0841	.7684	5.726	.1051	.4316	2.912

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1927.2	7601.3	57009.	4700.3
Stddev	2.8	1.8	119.	37.1
%RSD	.14642	.02387	.20860	.78942
#1	1924.2	7600.1	57023.	4665.2
#2	1927.9	7600.4	56884.	4696.5
#3	1929.7	7603.4	57121.	4739.1

Zoom In Zoom Out

Sample Name: MP31553-S1 Acquired: 1/26/2017 17:37:17 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0416	195.2	1.814	3.592	.0760	347.6	.0490	.5031	.3396	.5251
Stddev	.0015	.5	.002	.017	.0005	.5	.0003	.0006	.0016	.0021
%RSD	3.666	.2485	.1116	.4641	.7115	.1492	.5644	.1278	.4608	.3909
#1	.0431	195.2	1.812	3.601	.0759	347.6	.0493	.5035	.3390	.5267
#2	.0400	195.7	1.816	3.602	.0755	348.1	.0490	.5023	.3384	.5257
#3	.0417	194.7	1.813	3.573	.0765	347.1	.0487	.5035	.3413	.5228

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	322.8	74.73	116.8	7.144	.3918	24.85	.6188	1.375	.1119	1.729
Stddev	.7	.24	.4	.015	.0008	.05	.0015	.003	.0019	.008
%RSD	.2280	.3239	.3134	.2065	.2000	.2183	.2456	.2245	1.717	.4414
#1	322.9	74.99	116.5	7.148	.3909	24.80	.6181	1.379	.1136	1.728
#2	323.5	74.69	116.9	7.156	.3924	24.91	.6177	1.373	.1098	1.737
#3	322.1	74.51	117.2	7.127	.3920	24.85	.6205	1.373	.1123	1.722

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.146	.4674	1.084	6.993	1.999	.7556	2.812
Stddev	.006	.0025	.004	.020	.012	.0039	.002
%RSD	.2979	.5387	.3958	.2840	.6021	.5140	.0692
#1	2.147	.4694	1.082	7.014	2.004	.7591	2.813
#2	2.152	.4646	1.089	6.975	1.986	.7514	2.810
#3	2.139	.4684	1.081	6.989	2.008	.7563	2.813

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1937.8	7251.5	54242.	4473.1
Stddev	5.4	11.9	310.	24.3
%RSD	.27979	.16372	.57100	.54432
#1	1938.6	7244.4	54130.	4456.0
#2	1942.7	7265.2	54592.	4501.0
#3	1932.0	7244.9	54003.	4462.4

Zoom In Zoom Out

Sample Name: MP31553-S2 Acquired: 1/26/2017 17:41:17 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0397	188.8	1.764	3.544	.0733	331.4	.0473	.4860	.3232	.5480
Stddev	.0007	.4	.011	.012	.0004	.9	.0001	.0005	.0003	.0033
%RSD	1.725	.1922	.6075	.3487	.4841	.2771	.2639	.1074	.0924	.6041
#1	.0395	189.2	1.773	3.558	.0737	331.9	.0474	.4864	.3231	.5515
#2	.0391	188.5	1.752	3.541	.0730	330.3	.0473	.4854	.3229	.5449
#3	.0405	188.8	1.767	3.534	.0732	331.9	.0471	.4862	.3235	.5476

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	320.0	72.78	112.4	6.954	.3750	24.04	.5975	1.300	.1133	1.668
Stddev	1.9	.36	.5	.010	.0008	.06	.0007	.004	.0031	.005
%RSD	.6071	.4988	.4525	.1499	.2001	.2529	.1169	.3428	2.779	.2967
#1	320.3	73.16	112.6	6.960	.3752	24.10	.5983	1.304	.1116	1.672
#2	317.9	72.73	111.8	6.942	.3742	23.98	.5970	1.296	.1113	1.663
#3	321.7	72.44	112.8	6.960	.3756	24.04	.5972	1.299	.1169	1.670

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.076	.4562	1.042	6.742	1.917	.7378	2.690
Stddev	.004	.0037	.001	.033	.006	.0047	.005
%RSD	.2144	.8117	.0942	.4944	.3149	.6396	.1739
#1	2.071	.4577	1.043	6.715	1.919	.7421	2.692
#2	2.080	.4520	1.041	6.731	1.922	.7327	2.685
#3	2.078	.4589	1.043	6.779	1.911	.7386	2.693

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1944.8	7282.0	55028.	4518.7
Stddev	1.8	11.7	275.	34.1
%RSD	.09500	.16039	.49938	.75375
#1	1942.6	7273.5	55253.	4524.7
#2	1945.9	7295.3	55108.	4549.3
#3	1945.8	7277.1	54722.	4482.0

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/26/2017 17:45:16 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2571	38.44	2.014	1.980	1.914	38.35	1.991	1.979	1.965	1.888
Stddev	.0016	.10	.004	.009	.005	.10	.001	.002	.006	.005
%RSD	.6270	.2712	.1757	.4435	.2716	.2707	.0419	.0766	.3150	.2762
#1	.2553	38.50	2.013	1.988	1.918	38.39	1.990	1.977	1.959	1.886
#2	.2577	38.32	2.011	1.970	1.908	38.23	1.991	1.979	1.966	1.885
#3	.2584	38.50	2.018	1.981	1.915	38.43	1.992	1.980	1.971	1.894
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	37.67	39.79	38.91	1.941	2.014	38.90	2.037	1.922	1.918	2.019
Stddev	.09	.15	.08	.005	.002	.06	.004	.005	.002	.007
%RSD	.2356	.3790	.1987	.2822	.1203	.1478	.2024	.2723	.0967	.3308
#1	37.67	39.95	39.00	1.941	2.011	38.94	2.034	1.923	1.920	2.014
#2	37.58	39.65	38.88	1.935	2.014	38.83	2.035	1.927	1.916	2.016
#3	37.76	39.78	38.86	1.946	2.016	38.92	2.042	1.917	1.918	2.026
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.466	2.094	2.002	2.017	1.926	2.053	1.982
Stddev	.002	.004	.008	.017	.005	.010	.002
%RSD	.0906	.1718	.3837	.8325	.2590	.4706	.0762
#1	2.467	2.093	2.005	1.997	1.921	2.043	1.983
#2	2.464	2.091	1.993	2.025	1.931	2.057	1.982
#3	2.468	2.098	2.007	2.027	1.927	2.061	1.980
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

SGS ACCUTEST FA40657

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/26/2017 17:45:16 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1893.2	5387.8	40810.	3359.9
Stddev	4.1	4.9	286.	15.8
%RSD	.21399	.09133	.70200	.47101
#1	1890.3	5386.8	41091.	3354.2
#2	1891.4	5393.1	40820.	3377.8
#3	1897.8	5383.4	40518.	3347.7

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/26/2017 17:49:13 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	-.0020	.0006	.0004	.0000	-.0031	.0000	.0000	.0001	.0002
Stddev	.0003	.0045	.0007	.0002	.0000	.0039	.000	.000	.0002	.0005
%RSD	767.4	222.0	116.5	44.81	196.8	125.8	265.6	132.5	158.8	330.8
#1	-.0002	.0029	-.0002	.0006	.0001	-.0059	.0000	-.0001	.0001	.0001
#2	.0003	-.0032	.0013	.0005	.0000	.0014	.0000	.0000	-.0001	-.0003
#3	.0000	-.0057	.0008	.0002	.0000	-.0047	-.0001	-.0001	.0004	.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0054	-.0818	-.0104	.0000	.0004	.0115	.0000	.0000	.0020	.0009
Stddev	.0025	.0039	.0249	.0000	.0005	.0088	.000	.0006	.0008	.0002
%RSD	45.70	4.728	238.4	575.8	135.3	76.59	172.7	1712.	38.48	20.53
#1	.0026	-.0773	.0172	.0000	.0009	.0211	.0000	.0003	.0027	.0009
#2	.0063	-.0844	-.0174	.0000	.0003	.0096	.0000	-.0006	.0020	.0011
#3	.0073	-.0836	-.0311	.0001	-.0001	.0038	-.0001	.0004	.0012	.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0002	.0000	.0002	.0003	.0001	.0000
Stddev	.0006	.0003	.000	.0001	.0002	.0003	.0000
%RSD	438.3	139.7	34.43	56.93	82.05	291.5	76.63
#1	-.0006	.0005	.0000	.0001	.0000	-.0001	.0000
#2	.0006	-.0001	-.0001	.0002	.0004	.0004	.0000
#3	.0004	.0002	.0000	.0003	.0004	.0000	.0000
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/26/2017 17:49:13 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2096.5	5569.9	42325.	3374.0
Stddev	1.7	4.7	56.	37.5
%RSD	.08105	.08474	.13255	1.1120
#1	2097.5	5574.3	42328.	3330.8
#2	2094.5	5570.4	42267.	3393.6
#3	2097.4	5564.9	42379.	3397.7

Zoom In Zoom Out

Sample Name: FA39850-25T Acquired: 1/26/2017 17:53:27 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0149	107.2	.1668	12.32	.0171	46.28	.0123	.1236	.5031
Stddev	.0009	.3	.0014	.02	.0002	.20	.0001	.0012	.0030
%RSD	5.840	.3105	.8382	.1936	1.179	.4267	.5736	.9896	.5950
#1	.0153	106.9	.1652	12.32	.0173	46.20	.0124	.1236	.5039
#2	.0155	107.0	.1679	12.29	.0171	46.14	.0122	.1224	.4998
#3	.0139	107.5	.1672	12.34	.0169	46.51	.0123	.1248	.5057

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	1.226	398.3	8.773	12.00	4.148	.0843	3.671	.7646	F24.63
Stddev	.002	1.9	.194	.14	.003	.0007	.045	.0004	.04
%RSD	.1677	.4837	2.216	1.157	.0790	.7753	1.215	.0584	.1559
#1	1.226	397.4	8.644	11.88	4.145	.0847	3.708	.7641	24.59
#2	1.224	396.9	8.997	12.15	4.151	.0836	3.621	.7647	24.67
#3	1.229	400.5	8.679	11.98	4.148	.0847	3.683	.7650	24.64

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0304	.0536	1.457	3.450	1.350	2.586	.0086	.4197	F21.30
Stddev	.0032	.0135	.004	.008	.008	.009	.0002	.0030	.06
%RSD	10.60	25.23	.2556	.2357	.5820	.3351	2.872	.7234	.2780
#1	.0342	.0395	1.454	3.443	1.350	2.579	.0088	.4198	21.24
#2	.0285	.0546	1.456	3.448	1.342	2.583	.0083	.4227	21.30
#3	.0287	.0665	1.461	3.459	1.358	2.596	.0087	.4166	21.36

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2050.2	5969.0	45060.	3608.3
Stddev	2.8	5.8	134.	9.7
%RSD	.13700	.09759	.29691	.26895
#1	2051.6	5971.6	45082.	3616.0
#2	2046.9	5973.0	44917.	3611.5
#3	2051.9	5962.3	45181.	3597.4

Zoom In Zoom Out

Sample Name: FA39850-35T Acquired: 1/26/2017 17:57:31 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0051	200.1	.0406	1.058	.0059	22.77	-.0018	.1252	.4239	.4617
Stddev	.0012	1.0	.0039	.010	.0004	.11	.0003	.0004	.0026	.0007
%RSD	23.89	.5221	9.480	.9247	7.552	.4847	16.32	.3330	.6234	.1543
#1	.0037	200.7	.0384	1.064	.0063	22.80	-.0021	.1254	.4243	.4624
#2	.0059	198.9	.0451	1.047	.0054	22.64	-.0016	.1248	.4211	.4616
#3	.0057	200.7	.0385	1.063	.0059	22.86	-.0016	.1255	.4264	.4610

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	292.1	26.47	60.12	7.228	.0029	1.517	.4561	.3108	.0098	.0271
Stddev	.7	.18	.37	.018	.0001	.010	.0026	.0018	.0018	.0089
%RSD	.2484	.6835	.6236	.2486	4.904	.6514	.5777	.5940	18.58	32.87
#1	292.7	26.67	60.51	7.210	.0028	1.528	.4591	.3115	.0077	.0329
#2	291.3	26.43	59.76	7.228	.0030	1.508	.4543	.3122	.0106	.0316
#3	292.3	26.31	60.10	7.246	.0029	1.515	.4549	.3088	.0110	.0169

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.148	.0207	.1081	10.28	.0157	.4521	.9452
Stddev	.003	.0006	.0005	.03	.0020	.0011	.0022
%RSD	.2264	2.901	.4796	.2458	12.73	.2324	.2285
#1	1.145	.0210	.1086	10.30	.0138	.4533	.9476
#2	1.150	.0200	.1082	10.25	.0157	.4515	.9434
#3	1.149	.0211	.1076	10.28	.0178	.4516	.9447

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2023.3	6057.2	45329.	3679.0
Stddev	2.4	6.2	275.	28.2
%RSD	.11725	.10183	.60575	.76692
#1	2021.1	6050.2	45106.	3656.4
#2	2025.8	6061.5	45636.	3710.7
#3	2022.9	6060.1	45247.	3670.0

Zoom In Zoom Out

Sample Name: FA39850-38T Acquired: 1/26/2017 18:01:36 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0068	126.5	.1376	8.196	.0115	44.36	.0057	.1381	.2836	.6575
Stddev	.0010	.3	.0019	.039	.0004	.08	.0002	.0002	.0024	.0004
%RSD	14.90	.2453	1.376	.4743	3.188	.1745	3.231	.1557	.8322	.0644
#1	.0059	126.9	.1368	8.206	.0113	44.43	.0055	.1380	.2809	.6570
#2	.0079	126.3	.1398	8.153	.0119	44.27	.0058	.1383	.2846	.6579
#3	.0066	126.4	.1363	8.228	.0113	44.36	.0058	.1379	.2852	.6575

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	146.7	16.54	18.37	2.251	.0346	3.156	.3481	4.804	.0124	.0302
Stddev	.3	.10	.05	.007	.0010	.036	.0003	.008	.0049	.0020
%RSD	.2153	.5959	.2669	.2939	2.757	1.141	.0895	.1639	39.12	6.785
#1	147.0	16.57	18.42	2.252	.0357	3.146	.3479	4.805	.0114	.0282
#2	146.8	16.43	18.37	2.258	.0341	3.195	.3485	4.811	.0082	.0300
#3	146.4	16.62	18.32	2.245	.0340	3.125	.3480	4.795	.0178	.0323

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.221	.1787	1.086	3.141	.0048	.3761	4.364
Stddev	.004	.0014	.002	.010	.0033	.0029	.007
%RSD	.3182	.7762	.1993	.3169	69.75	.7632	.1517
#1	1.220	.1802	1.089	3.147	.0012	.3740	4.369
#2	1.217	.1783	1.085	3.146	.0053	.3793	4.367
#3	1.224	.1775	1.085	3.129	.0079	.3748	4.357

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2049.9	5993.7	44975.	3624.6
Stddev	5.2	8.2	220.	26.1
%RSD	.25176	.13644	.48992	.71975
#1	2045.7	5990.0	45066.	3595.1
#2	2048.4	5988.1	44724.	3644.8
#3	2055.7	6003.1	45136.	3633.8

Zoom In Zoom Out

Sample Name: FA39850-44T Acquired: 1/26/2017 18:05:41 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0074	73.76	.1109	F22.34	.0104	74.72	.0084	.1048	.2126
Stddev	.0010	.25	.0014	.13	.0006	.21	.0002	.0005	.0008
%RSD	13.00	.3446	1.238	.5730	5.863	.2757	2.507	.4921	.3764
#1	.0073	73.89	.1115	22.40	.0100	74.74	.0083	.1045	.2125
#2	.0084	73.92	.1118	22.43	.0102	74.92	.0082	.1046	.2135
#3	.0065	73.46	.1093	22.20	.0111	74.51	.0086	.1054	.2119

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.8367	229.0	8.704	6.381	2.735	.0593	2.700	.2579	13.22
Stddev	.0021	.7	.077	.032	.007	.0003	.028	.0015	.03
%RSD	.2495	.2926	.8853	.4950	.2755	.4671	1.052	.5924	.2506
#1	.8372	229.5	8.625	6.347	2.729	.0594	2.715	.2597	13.19
#2	.8385	229.3	8.779	6.409	2.744	.0595	2.719	.2573	13.21
#3	.8344	228.3	8.708	6.388	2.734	.0590	2.668	.2568	13.26

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0050	.0263	1.124	.4305	1.337	1.433	.0042	.3880	14.85
Stddev	.0048	.0101	.001	.0003	.004	.005	.0055	.0025	.01
%RSD	96.36	38.40	.1184	.0602	.3381	.3549	131.7	.6473	.0894
#1	.0101	.0322	1.122	.4308	1.339	1.437	.0041	.3890	14.86
#2	.0042	.0321	1.125	.4303	1.340	1.434	.0096	.3899	14.84
#3	.0006	.0146	1.124	.4305	1.332	1.427	-.0013	.3852	14.86

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2061.0	5917.4	44414.	3582.5
Stddev	3.4	16.4	181.	23.7
%RSD	.16551	.27755	.40759	.66028
#1	2061.2	5904.2	44483.	3578.2
#2	2064.3	5935.8	44209.	3561.3
#3	2057.5	5912.1	44550.	3608.0

Zoom In Zoom Out

Sample Name: FA40602-1 Acquired: 1/26/2017 18:09:46 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0102	311.4	.0905	3.124	.0082	189.7	.0006	.1888	1.306	.5838
Stddev	.0034	1.1	.0025	.014	.0003	.6	.0002	.0012	.005	.0018
%RSD	33.12	.3515	2.767	.4519	3.201	.3338	27.33	.6254	.3670	.3075
#1	.0064	311.2	.0885	3.122	.0081	189.4	.0004	.1875	1.311	.5855
#2	.0129	312.5	.0933	3.139	.0085	190.4	.0006	.1897	1.305	.5839
#3	.0112	310.3	.0898	3.111	.0080	189.3	.0008	.1893	1.301	.5819

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	466.1	24.80	180.8	9.201	.0062	5.435	1.086	.2828	.0011	.0372
Stddev	1.1	.12	.7	.033	.0001	.079	.002	.0049	.0021	.0061
%RSD	.2336	.4974	.4078	.3576	1.988	1.448	.2212	1.736	189.0	16.33
#1	465.5	24.75	181.4	9.236	.0062	5.421	1.085	.2798	.0026	.0384
#2	467.4	24.94	181.1	9.170	.0064	5.520	1.084	.2885	-.0013	.0306
#3	465.5	24.70	180.0	9.197	.0061	5.364	1.088	.2801	.0021	.0426

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.701	.0178	.7690	10.60	.0161	.8825	1.167
Stddev	.003	.0009	.0035	.02	.0019	.0025	.001
%RSD	.1647	5.301	.4513	.1634	11.96	.2778	.0957
#1	1.699	.0189	.7679	10.58	.0181	.8839	1.166
#2	1.700	.0175	.7730	10.61	.0142	.8839	1.167
#3	1.704	.0171	.7663	10.60	.0160	.8797	1.168

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1965.0	6048.7	45384.	3704.5
Stddev	1.9	6.0	135.	21.0
%RSD	.09907	.09931	.29702	.56661
#1	1964.9	6055.1	45231.	3705.3
#2	1967.0	6047.8	45484.	3683.1
#3	1963.1	6043.2	45438.	3725.1

7.1

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SGS ACCUTEST FA40657

Zoom In Zoom Out

Sample Name: FA40671-1 Acquired: 1/26/2017 18:13:49 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0008	65.76	.0173	.0620	.0001	1.460	-.0004	-.0005	.0921	.0118
Stddev	.0002	.24	.0008	.0002	.0001	.002	.0000	.0000	.0003	.0001
%RSD	31.36	.3660	4.352	.3392	105.0	.1508	7.427	10.55	.3185	.4414
#1	.0009	65.51	.0181	.0618	.0002	1.458	-.0004	-.0005	.0924	.0118
#2	.0009	65.78	.0174	.0621	.0000	1.461	-.0003	-.0004	.0921	.0119
#3	.0005	65.98	.0166	.0621	.0000	1.462	-.0003	-.0005	.0918	.0119

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	33.30	.1110	.2838	.0252	.0041	.1187	.0104	.0384	.0002	.0019
Stddev	.16	.0102	.0193	.0001	.0000	.0109	.0000	.0006	.0009	.0021
%RSD	.4657	9.188	6.795	.4995	.5815	9.219	.4603	1.503	440.7	111.7
#1	33.15	.1182	.2634	.0251	.0041	.1303	.0103	.0389	.0004	.0006
#2	33.29	.1156	.2862	.0253	.0041	.1172	.0104	.0378	.0010	.0043
#3	33.46	.0994	.3017	.0253	.0040	.1086	.0104	.0385	-.0008	.0007

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	1.169	.0159	.1559	.7242	.0001	.0583	.0181
Stddev	.002	.0000	.0006	.0010	.0012	.0003	.0001
%RSD	.1425	.1742	.4120	.1438	2044.	.5754	.5806
#1	1.168	.0159	.1551	.7250	-.0012	.0583	.0180
#2	1.169	.0159	.1561	.7244	.0002	.0586	.0180
#3	1.171	.0160	.1564	.7230	.0012	.0579	.0182

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2066.6	5916.5	44432.	3573.1
Stddev	7.3	16.7	166.	15.1
%RSD	.35491	.28169	.37260	.42316
#1	2071.3	5925.0	44311.	3586.8
#2	2070.5	5927.2	44365.	3575.7
#3	2058.2	5897.3	44621.	3556.9

Zoom In Zoom Out

Sample Name: FA40671-2 Acquired: 1/26/2017 18:17:55 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0008	70.33	.0180	.0542	.0002	4.941	-.0003	-.0005	.1039	.0263
Stddev	.0003	.51	.0005	.0005	.0001	.034	.0000	.0000	.0001	.0004
%RSD	43.08	.7320	3.022	.9893	32.91	.6819	14.80	10.27	.1179	1.543
#1	.0008	69.80	.0176	.0536	.0002	4.905	-.0003	-.0005	.1040	.0267
#2	.0011	70.35	.0186	.0543	.0002	4.946	-.0003	-.0005	.1039	.0261
#3	.0004	70.83	.0178	.0546	.0001	4.972	-.0004	-.0004	.1037	.0260

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	47.72	.2188	.4692	.0465	.0056	.1394	.0105	.0375	-.0005	.0038
Stddev	.37	.0172	.0131	.0001	.0001	.0096	.0004	.0003	.0004	.0015
%RSD	.7788	7.838	2.799	.1599	2.549	6.869	3.421	.8087	76.41	38.92
#1	47.33	.2116	.4541	.0464	.0058	.1377	.0109	.0372	-.0002	.0047
#2	47.76	.2065	.4781	.0464	.0056	.1309	.0103	.0376	-.0003	.0047
#3	48.07	.2384	.4753	.0466	.0055	.1498	.0104	.0377	-.0009	.0021

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	1.179	.0141	.1465	.6583	.0004	.0787	.0269
Stddev	.004	.0004	.0013	.0039	.0003	.0002	.0000
%RSD	.3094	2.557	.8812	.5941	92.93	.2017	.1581
#1	1.175	.0143	.1451	.6618	.0006	.0787	.0269
#2	1.178	.0137	.1468	.6590	.0000	.0785	.0269
#3	1.183	.0143	.1477	.6541	.0005	.0788	.0269

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2056.5	5906.5	43891.	3592.2
Stddev	3.4	10.2	128.	20.6
%RSD	.16634	.17332	.29253	.57210
#1	2058.3	5897.8	43748.	3609.5
#2	2052.6	5903.9	43928.	3597.5
#3	2058.7	5917.7	43997.	3569.5

Zoom In Zoom Out

Sample Name: FA40671-3 Acquired: 1/26/2017 18:22:00 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0015	110.1	.0273	.0788	.0004	14.59	-.0004	-.0003	.1603	.0536
Stddev	.0002	.1	.0001	.0003	.0001	.01	.0000	.0001	.0006	.0004
%RSD	16.02	.0953	.4823	.3533	32.51	.0696	11.15	35.47	.3844	.7066
#1	.0014	110.2	.0275	.0790	.0004	14.60	-.0004	-.0003	.1610	.0532
#2	.0018	110.1	.0272	.0785	.0002	14.58	-.0004	-.0004	.1603	.0539
#3	.0014	110.0	.0273	.0790	.0004	14.60	-.0003	-.0002	.1597	.0537

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	79.79	.4225	1.102	.0986	.0098	.1739	.0157	.0575	.0009	.0032
Stddev	.12	.0313	.017	.0003	.0002	.0144	.0002	.0004	.0014	.0009
%RSD	.1483	7.414	1.542	.3196	1.923	8.270	.9937	.6616	145.6	27.59
#1	79.88	.4274	1.121	.0989	.0096	.1669	.0158	.0577	.0021	.0032
#2	79.84	.3891	1.097	.0985	.0100	.1644	.0159	.0576	.0012	.0023
#3	79.65	.4512	1.088	.0983	.0098	.1905	.0156	.0570	-.0005	.0041

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	1.448	.0184	.2228	.9545	-.0002	.1287	.0459
Stddev	.002	.0004	.0002	.0012	.0006	.0002	.0001
%RSD	.1345	2.192	.0961	.1212	369.4	.1549	.1179
#1	1.447	.0181	.2227	.9549	-.0008	.1289	.0459
#2	1.447	.0188	.2227	.9554	.0000	.1288	.0459
#3	1.450	.0182	.2230	.9532	.0004	.1285	.0460

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2016.9	5977.0	44222.	3654.8
Stddev	6.2	9.9	76.	14.1
%RSD	.30984	.16548	.17092	.38590
#1	2010.4	5967.3	44160.	3641.2
#2	2017.4	5976.5	44199.	3669.3
#3	2022.8	5987.1	44306.	3654.0

Zoom In Zoom Out

Sample Name: CRIA Acquired: 1/26/2017 18:26:04 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0085	.2155	.0100	.2072	.0050	1.043	.0052	.0524	.0104	.0257
Stddev	.0006	.0135	.0010	.0006	.0001	.003	.0000	.0001	.0001	.0003
%RSD	6.750	6.257	10.21	.2999	2.045	.2878	.2511	.2622	.9996	1.268
#1	.0090	.2025	.0096	.2070	.0051	1.039	.0052	.0523	.0104	.0261
#2	.0085	.2146	.0092	.2067	.0051	1.045	.0052	.0524	.0104	.0256
#3	.0079	.2294	.0111	.2079	.0049	1.045	.0052	.0526	.0105	.0254

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	.3289	10.31	5.236	.0157	.0485	10.45	.0426	.0051	.0057	.0097
Stddev	.0083	.02	.011	.0000	.0002	.01	.0003	.0003	.0005	.0012
%RSD	2.531	.1711	.2149	.2639	.4912	.1302	.7381	5.791	8.040	12.44
#1	.3384	10.32	5.225	.0157	.0485	10.43	.0425	.0048	.0060	.0104
#2	.3226	10.29	5.247	.0157	.0482	10.46	.0423	.0054	.0060	.0083
#3	.3259	10.32	5.236	.0157	.0487	10.46	.0430	.0051	.0052	.0104

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	.0227	.0525	.0100	.0100	.0102	.0493	.0214
Stddev	.0003	.0003	.0001	.0001	.0008	.0003	.0001
%RSD	1.151	.5170	1.161	1.137	7.826	.5598	.6843
#1	.0230	.0526	.0101	.0099	.0098	.0495	.0214
#2	.0224	.0527	.0099	.0101	.0097	.0490	.0213
#3	.0228	.0522	.0099	.0101	.0111	.0493	.0216

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2058.1	5632.8	42272.	3385.5
Stddev	2.0	11.8	180.	14.0
%RSD	.09959	.20969	.42462	.41458
#1	2055.8	5643.3	42192.	3369.3
#2	2059.2	5635.1	42147.	3393.2
#3	2059.5	5620.0	42478.	3394.1

Zoom In Zoom Out

Sample Name: ICSA Acquired: 1/26/2017 18:30:14 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0000	496.9	-.0002	.0001	.0000	467.1	-.0001	.0004	-.0003
Stddev	.001	2.9	.0009	.0000	.000	2.6	.0001	.0001	.0003
%RSD	1782.	.5743	397.5	80.98	31.24	.5606	81.69	34.75	115.6
#1	-.0006	499.6	.0008	.0000	.0000	469.9	-.0002	.0004	-.0005
#2	.0002	497.2	-.0004	.0001	.0000	466.7	-.0001	.0002	-.0005
#3	.0003	493.9	-.0010	.0000	-.0001	464.7	.0000	.0005	.0001

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0010	181.1	.0131	F504.4	-.0011	-.0006	.1591	-.0002	.0005
Stddev	.0005	1.0	.0322	2.1	.0001	.0002	.0160	.0001	.0006
%RSD	46.09	.5661	246.0	.4179	4.999	33.68	10.07	41.15	102.4
#1	-.0010	182.1	-.0199	506.5	-.0011	-.0004	.1658	-.0001	.0008
#2	-.0006	181.1	.0147	504.3	-.0010	-.0008	.1707	-.0003	-.0001
#3	-.0015	180.1	.0444	502.3	-.0011	-.0006	.1408	-.0003	.0009

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0027	.0024	.0172	.0028	-.0002	-.0003	.0005	.0010	-.0012
Stddev	.0009	.0024	.0007	.0002	.0001	.0001	.0020	.0001	.0001
%RSD	33.69	100.8	3.860	6.488	35.05	23.88	369.4	5.362	10.71
#1	-.0024	.0042	.0170	.0027	-.0001	-.0003	.0004	.0009	-.0013
#2	-.0037	-.0003	.0166	.0027	-.0003	-.0004	-.0014	.0010	-.0010
#3	-.0020	.0032	.0179	.0030	-.0002	-.0002	.0026	.0009	-.0013

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1678.1	5075.2	37420.	3246.8
Stddev	7.7	4.2	205.	9.9
%RSD	.45862	.08258	.54783	.30540
#1	1669.6	5078.9	37592.	3243.6
#2	1680.2	5076.0	37475.	3238.8
#3	1684.6	5070.7	37193.	3257.9

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/26/2017 18:34:28 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2603	38.43	1.993	1.956	1.907	38.46	1.990	1.978	1.982	1.914
Stddev	.0012	.05	.004	.009	.003	.04	.003	.002	.005	.004
%RSD	.4645	.1315	.2223	.4723	.1603	.0968	.1249	.0856	.2708	.1917
#1	.2589	38.41	1.992	1.947	1.906	38.45	1.987	1.976	1.977	1.913
#2	.2608	38.40	1.999	1.955	1.905	38.43	1.992	1.980	1.983	1.911
#3	.2611	38.49	1.990	1.966	1.911	38.50	1.990	1.978	1.987	1.918
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	38.19	39.39	38.83	1.953	2.023	39.03	2.023	1.942	1.933	2.009
Stddev	.21	.13	.09	.005	.004	.05	.005	.001	.005	.008
%RSD	.5418	.3421	.2213	.2404	.2118	.1198	.2505	.0364	.2626	.4093
#1	38.43	39.32	38.87	1.954	2.018	39.08	2.020	1.941	1.928	2.001
#2	38.06	39.31	38.73	1.947	2.023	38.99	2.029	1.942	1.932	2.009
#3	38.09	39.55	38.88	1.957	2.027	39.03	2.021	1.942	1.938	2.017
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.484	2.081	2.008	2.053	1.950	2.067	1.983
Stddev	.002	.003	.004	.009	.001	.002	.003
%RSD	.0872	.1610	.2072	.4635	.0266	.0875	.1622
#1	2.483	2.079	2.007	2.045	1.950	2.065	1.980
#2	2.482	2.085	2.005	2.050	1.950	2.068	1.986
#3	2.486	2.080	2.013	2.063	1.951	2.069	1.985
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/26/2017 18:34:28 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1887.3	5424.3	40590.	3338.4
Stddev	4.6	13.8	153.	10.2
%RSD	.24581	.25430	.37813	.30466
#1	1890.6	5434.8	40751.	3345.5
#2	1882.0	5408.7	40574.	3342.9
#3	1889.2	5429.5	40445.	3326.7

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/26/2017 18:38:24 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0087	.0000	.0002	.0000	-.0047	.0000	-.0001	.0000	-.0001
Stddev	.000	.0123	.001	.0002	.000	.0059	.000	.0001	.0002	.0004
%RSD	613.9	141.4	31640.	135.8	90.17	124.5	5567.	89.43	413.3	296.8
#1	-.0001	.0020	-.0007	.0002	-.0001	-.0022	.0000	-.0001	.0002	.0002
#2	.0002	.0012	.0011	.0004	.0000	-.0114	.0000	-.0001	-.0001	.0000
#3	-.0001	.0229	-.0004	-.0001	-.0001	-.0005	.0000	.0000	.0000	-.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0080	-.0407	.0057	.0000	.0004	.0223	.0000	-.0001	.0011	-.0004
Stddev	.0034	.0162	.0161	.000	.0004	.0043	.0002	.0005	.0010	.0010
%RSD	42.80	39.84	279.2	256.8	112.6	19.40	797.3	352.8	90.82	259.0
#1	.0117	-.0384	.0128	.0000	.0009	.0175	-.0001	-.0001	.0000	-.0015
#2	.0049	-.0258	-.0126	-.0001	.0002	.0236	.0002	-.0007	.0014	.0003
#3	.0074	-.0580	.0171	.0000	.0001	.0258	-.0001	.0004	.0018	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	-.0002	.0001	.0000	.0000	.0000	.0000
Stddev	.0004	.0001	.0000	.000	.001	.000	.0000
%RSD	313.2	74.72	84.65	366.6	1935.	523.9	118.4
#1	-.0005	-.0002	.0001	.0000	.0006	-.0001	.0001
#2	.0003	-.0003	.0000	.0000	-.0002	-.0003	.0000
#3	-.0001	.0000	.0000	-.0001	-.0005	.0002	.0000
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/26/2017 18:38:24 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2090.6	5603.3	42456.	3361.1
Stddev	4.0	11.2	176.	37.1
%RSD	.19114	.19930	.41394	1.1048
#1	2095.1	5616.2	42365.	3345.0
#2	2087.7	5597.6	42658.	3334.8
#3	2088.9	5596.2	42344.	3403.6

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 1/26/2017 18:42:39 Type: Unk
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	F.9197	F500.6	1.143	.5158	.4869	477.4	.9547	.4775	.5051
Stddev	.0044	2.7	.001	.0035	.0016	8.0	.0020	.0008	.0011
%RSD	.4799	.5362	.0457	.6783	.3325	1.681	.2085	.1596	.2234
#1	.9240	501.3	1.143	.5167	.4866	486.6	.9527	.4767	.5054
#2	.9152	497.6	1.142	.5120	.4855	472.2	.9547	.4775	.5060
#3	.9197	502.8	1.142	.5189	.4887	473.3	.9567	.4782	.5038

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.5232	179.6	.0203	F500.2	.4931	.9597	.1743	.9754	.9732
Stddev	.0003	.8	.0751	2.7	.0005	.0012	.0104	.0014	.0053
%RSD	.0531	.4466	369.8	.5421	.0981	.1292	5.983	.1413	.5462
#1	.5234	179.8	-.0558	501.2	.4928	.9583	.1658	.9740	.9695
#2	.5228	178.7	.0943	497.1	.4937	.9600	.1711	.9755	.9708
#3	.5233	180.2	.0224	502.2	.4928	.9607	.1860	.9767	.9793

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.055	1.074	.1107	.9722	1.023	1.023	.9973	.4716	.9527
Stddev	.003	.003	.0012	.0006	.005	.002	.0038	.0017	.0034
%RSD	.2473	.3136	1.105	.0616	.5169	.1856	.3834	.3660	.3541
#1	1.053	1.071	.1095	.9724	1.021	1.024	.9936	.4734	.9492
#2	1.058	1.077	.1119	.9716	1.019	1.021	.9970	.4700	.9532
#3	1.055	1.074	.1107	.9728	1.029	1.023	1.001	.4712	.9559

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1658.3	5059.0	37372.	3231.9
Stddev	6.9	15.9	105.	31.5
%RSD	.41469	.31440	.28123	.97376
#1	1662.6	5073.5	37257.	3201.7
#2	1662.0	5061.5	37463.	3264.5
#3	1650.4	5042.0	37397.	3229.4

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/26/2017 18:46:45 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2577	38.58	1.986	1.971	1.917	38.53	1.986	1.976	1.974	1.924
Stddev	.0007	.19	.002	.008	.008	.18	.004	.002	.004	.003
%RSD	.2841	.4970	.1011	.4172	.4330	.4556	.1792	.1170	.2232	.1279
#1	.2571	38.44	1.986	1.970	1.910	38.39	1.982	1.973	1.969	1.927
#2	.2574	38.50	1.984	1.963	1.915	38.48	1.988	1.978	1.974	1.923
#3	.2585	38.80	1.988	1.980	1.926	38.73	1.987	1.977	1.978	1.923
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	38.17	39.54	38.65	1.970	2.025	39.14	2.013	1.939	1.938	1.999
Stddev	.23	.16	.18	.005	.004	.12	.002	.002	.006	.005
%RSD	.6016	.4140	.4550	.2799	.1968	.3067	.1063	.1055	.2981	.2366
#1	37.91	39.51	38.46	1.974	2.020	39.04	2.011	1.940	1.933	1.994
#2	38.25	39.40	38.67	1.972	2.026	39.10	2.014	1.940	1.938	2.001
#3	38.35	39.72	38.81	1.964	2.028	39.27	2.015	1.937	1.944	2.003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.490	2.076	2.019	2.053	1.950	2.053	1.982
Stddev	.005	.003	.008	.007	.004	.003	.004
%RSD	.2217	.1388	.3842	.3395	.1944	.1568	.1760
#1	2.485	2.073	2.012	2.048	1.951	2.052	1.978
#2	2.489	2.078	2.017	2.050	1.954	2.050	1.985
#3	2.496	2.077	2.027	2.061	1.946	2.056	1.982
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/26/2017 18:46:45 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1892.9	5436.4	40792.	3355.6
Stddev	5.0	11.7	221.	38.7
%RSD	.26315	.21486	.54243	1.1536
#1	1892.4	5447.7	41036.	3385.9
#2	1888.2	5424.4	40735.	3368.9
#3	1898.1	5437.1	40605.	3312.0

7.1 7

SGS ACCUTEST FA40657

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/26/2017 18:50:41 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	-.0074	-.0003	.0003	.0001	.0025	.0000	.0001	-.0001	.0000
Stddev	.0002	.0074	.0011	.0000	.0001	.0025	.0000	.0001	.0001	.0001
%RSD	98.94	99.07	353.8	5.470	43.22	96.87	93.12	64.95	66.04	275.5
#1	.0000	-.0153	.0010	.0003	.0001	.0054	.0001	.0000	-.0002	-.0001
#2	.0005	-.0062	-.0011	.0004	.0002	.0011	.0000	.0001	-.0001	.0002
#3	.0002	-.0007	-.0009	.0003	.0002	.0011	.0000	.0001	.0000	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0115	-.0382	-.0025	.0001	.0007	.0185	.0000	.0001	.0012	.0002
Stddev	.0035	.0298	.0213	.0001	.0004	.0014	.0002	.0003	.0008	.0009
%RSD	30.18	77.95	858.3	66.38	57.07	7.423	875700.	282.1	61.67	444.9
#1	.0152	-.0039	.0188	.0002	.0011	.0179	-.0003	.0004	.0008	.0005
#2	.0111	-.0571	-.0025	.0001	.0006	.0176	.0002	.0000	.0021	.0010
#3	.0083	-.0537	-.0238	.0000	.0004	.0201	.0001	-.0001	.0008	-.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005	.0001	.0002	.0001	.0003	.0000	.0000
Stddev	.0006	.0001	.0001	.0001	.0004	.0002	.0001
%RSD	108.5	137.6	80.84	48.65	154.7	676.1	198.0
#1	.0000	.0001	.0002	.0002	.0006	.0002	.0001
#2	.0011	.0000	.0003	.0001	.0005	.0001	.0001
#3	.0005	.0001	.0000	.0001	-.0002	-.0002	.0000
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/26/2017 18:50:41 Type: QC
Method: 60102007_041712(v514) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2092.5	5593.9	42261.	3348.0
Stddev	2.8	2.8	25.	3.7
%RSD	.13602	.05014	.05938	.11007
#1	2095.8	5593.9	42253.	3347.5
#2	2090.7	5591.1	42289.	3351.9
#3	2091.1	5596.7	42241.	3344.6

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Ag 328.068 {103}	X	3	V	-0.009834	0.000000	No
			Fe	-0.000001	0.000000	No
			Mg	0.000002	0.000000	No
Al 396.152 { 85}	X	1	Mo	0.035224	0.000000	No
As 189.042 {478}	X	5	Fe	-0.000062	0.000000	No
			Cr	-0.000226	0.000000	No
			Mo	-0.000017	0.000000	No
			Al	0.000004	0.000000	No
			Ca	0.000002	0.000000	No
Ba 455.403 { 74}	X	1	Fe	0.000018	0.000000	No
Be 313.042 {108}	X	2	V	0.000115	0.000000	No
			Ti	-0.000059	0.000000	No
Ca 317.933 {106}	X	None				
Cd 226.502 {449}	X	4	Fe	0.000061	0.000000	No
			Ca	0.000001	0.000000	No
			Al	-0.000001	0.000000	No
			Ti	0.000151	0.000000	No
Co 228.616 {447}	X	3	Mo	-0.001220	0.000000	No
			Ti	0.003012	0.000000	No
			Fe	0.000005	0.000000	No
Cr 267.716 {126}	X	3	Al	0.000005	0.000000	No
			Fe	0.000003	0.000000	No
			Ca	0.000002	0.000000	No
Cu 324.754 {104}	X	10	Fe	-0.000196	0.000000	No
			Ca	0.000002	0.000000	No
			Mo	0.000528	0.000000	No
			Sn	-0.000012	0.000000	No
			V	-0.000158	0.000000	No
			Ti	-0.000251	0.000000	No
			Al	0.000004	0.000000	No
			Mg	0.000002	0.000000	No
			Co	-0.000787	0.000000	No
			Cd	0.000240	0.000000	No
Fe 259.940 {130}	X	None				
In 230.606 {446}*	X	None				
K 766.490 { 44}	X	None				
Mg 279.079 {121}	X	None				
Mn 257.610 {131}	X	2	Fe	0.000004	0.000000	No
			Mg	0.000001	0.000000	No
Mo 202.030 {467}	X	1	Fe	-0.000022	0.000000	No
Na 589.592 { 57}	X	None				
Ni 231.604 {445}	X	7	Fe	-0.000006	0.000000	No
			Co	-0.000054	0.000000	No
			Mo	0.000005	0.000000	No
			Sb	-0.000120	0.000000	No
			Al	0.000003	0.000000	No
			Be	-0.000269	0.000000	No
			Tl	0.000440	0.000000	No
Pb 220.353 {453}	X	9	Al	0.000261	0.000000	No
			Fe	-0.000065	0.000000	No
			Mo	-0.001012	0.000000	No
			Cu	0.001070	0.000000	No
			Ti	0.000036	0.000000	No
			Si	0.000071	0.000000	No
			Ca	-0.000005	0.000000	No
			Cr	0.000050	0.000000	No
			Mg	0.000004	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Sb 206.833 {463}	☒	10	Fe	0.000012	0.000000	No
			Cr	0.012140	0.000000	No
			Mo	-0.004076	0.000000	No
			V	-0.000611	0.000000	No
			Sn	-0.010736	0.000000	No
			Ti	0.000040	0.000000	No
			Ca	0.000004	0.000000	No
			Ni	-0.000438	0.000000	No
			Mg	-0.000002	0.000000	No
			Al	0.000003	0.000000	No
Se 196.090 {472}	☒	10	Fe	-0.000037	0.000000	No
			Ca	-0.000001	0.000000	No
			Mn	0.000574	0.000000	No
			Mo	0.000111	0.000000	No
			Al	-0.000024	0.000000	No
			V	0.000000	0.000000	No
			Zn	0.000000	0.000000	No
			Sr	0.000137	0.000000	No
			As	-0.000032	0.000000	No
			Be	0.000212	0.000000	No
Si 212.412 {459}	☒	1	Mo	0.019120	0.000000	No
Sn 189.989 {477}	☒	None				
Sr 407.771 { 83}	☒	1	Ca	0.000099	0.000000	No
Ti 334.941 {101}	☒	1	Ca	-0.000011	0.000000	No
Tl 190.856 {477}	☒	11	Co	0.001145	0.000000	No
			Fe	0.000015	0.000000	No
			Al	-0.000011	0.000000	No
			Ba	-0.000051	0.000000	No
			Ti	-0.002651	0.000000	No
			Sb	0.000012	0.000000	No
			Ca	0.000003	0.000000	No
			Cr	0.000230	0.000000	No
			Mg	-0.000003	0.000000	No
			Mn	0.000818	0.000000	No
			V	-0.038621	0.000000	No
V 292.402 {115}	☒	5	Fe	0.000003	0.000000	No
			Cr	-0.002590	0.000000	No
			Mo	-0.005797	0.000000	No
			Ti	0.000364	0.000000	No
			Mn	-0.000693	0.000000	No
Y 224.306 {450}*	☒	None				
Y 360.073 { 94}*	☒	None				
Y 371.030 { 91}*	☒	None				
Zn 206.200 {463}	☒	5	Cr	-0.000965	0.000000	No
			Al	0.000005	0.000000	No
			Ca	0.000003	0.000000	No
			Fe	0.000006	0.000000	No
			As	0.001128	0.000000	No

	Element, Wavelength and Order	Date of Fit	Date of Cal.	Type of Fit	Weighting	A0	A1	A2	n (Exponent)
	Ag 328.068 {103}	1/26/2017 8:04:16	1/26/2017 8:04:16	Linear	1/Conc	-0.001006	0.482227	0.000000	1.000000
	Al 396.152 { 85}	1/26/2017 8:04:16	1/26/2017 8:04:16	Linear	1/Conc	0.001111	0.187521	0.000000	1.000000
	As 189.042 {478}	1/26/2017 8:04:16	1/26/2017 8:04:16	Linear	1/Conc	-0.000295	0.203977	0.000000	1.000000
	Ba 455.403 { 74}	1/26/2017 8:04:16	1/26/2017 8:04:16	Linear	1/Conc	0.001430	10.754476	0.000000	1.000000
	Be 313.042 {108}	1/26/2017 8:04:16	1/26/2017 8:04:16	Linear	1/Conc	0.000277	9.212059	0.000000	1.000000
	Ca 317.933 {106}	1/26/2017 8:04:16	1/26/2017 8:04:16	Linear	1/Conc	0.006602	0.331652	0.000000	1.000000
	Cd 226.502 {449}	1/26/2017 8:04:16	1/26/2017 8:04:16	Linear	1/Conc	-0.000094	5.518058	0.000000	1.000000
	Co 228.616 {447}	1/26/2017 8:04:16	1/26/2017 8:04:16	Linear	1/Conc	0.000502	2.604897	0.000000	1.000000
	Cr 267.716 {126}	1/26/2017 8:04:16	1/26/2017 8:04:16	Linear	1/Conc	0.000423	0.494948	0.000000	1.000000
	Cu 324.754 {104}	1/26/2017 8:04:16	1/26/2017 8:04:16	Linear	1/Conc	0.001819	0.636319	0.000000	1.000000
	Fe 259.940 {130}	1/26/2017 8:04:16	1/26/2017 8:04:16	Linear	1/Conc	0.001977	0.179440	0.000000	1.000000
	In 230.606 {446}*	1/26/2017 7:42:17	5/5/2010 12:30:54	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	K 766.490 { 44}	1/26/2017 8:04:16	1/26/2017 8:04:16	Linear	1/Conc	-0.012915	0.128399	0.000000	1.000000
	Mg 279.079 {121}	1/26/2017 8:04:16	1/26/2017 8:04:16	Linear	1/Conc	0.000705	0.030802	0.000000	1.000000
	Mn 257.610 {131}	1/26/2017 8:04:16	1/26/2017 8:04:16	Linear	1/Conc	0.000429	2.283822	0.000000	1.000000
	Mo 202.030 {467}	1/26/2017 8:04:16	1/26/2017 8:04:16	Linear	1/Conc	0.000596	1.127456	0.000000	1.000000
	Na 589.592 { 57}	1/26/2017 8:04:16	1/26/2017 8:04:16	Linear	1/Conc	0.000772	0.484358	0.000000	1.000000
	Ni 231.604 {445}	1/26/2017 8:04:16	1/26/2017 8:04:16	Linear	1/Conc	0.000333	1.258390	0.000000	1.000000
	Pb 220.353 {453}	1/26/2017 8:04:16	1/26/2017 8:04:16	Linear	1/Conc	0.001293	1.399457	0.000000	1.000000
	Sb 206.833 {463}	1/26/2017 8:04:16	1/26/2017 8:04:16	Linear	1/Conc	0.000409	0.228439	0.000000	1.000000
	Se 196.090 {472}	1/26/2017 8:04:16	1/26/2017 8:04:16	Linear	1/Conc	-0.001460	0.135744	0.000000	1.000000
	Si 212.412 {459}	1/26/2017 8:04:16	1/26/2017 8:04:16	Linear	1/Conc	0.004680	0.293592	0.000000	1.000000
	Sn 189.989 {477}	1/26/2017 8:04:16	1/26/2017 8:04:16	Linear	1/Conc	0.000763	0.538537	0.000000	1.000000
	Sr 407.771 { 83}	1/26/2017 8:04:16	1/26/2017 8:04:16	Linear	1/Conc	-0.007901	15.398204	0.000000	1.000000
	Ti 334.941 {101}	1/26/2017 8:04:16	1/26/2017 8:04:16	Linear	1/Conc	0.001751	1.522511	0.000000	1.000000
	Tl 190.856 {477}	1/26/2017 8:04:16	1/26/2017 8:04:16	Linear	1/Conc	-0.003628	0.656654	0.000000	1.000000
	V 292.402 {115}	1/26/2017 8:04:16	1/26/2017 8:04:16	Linear	1/Conc	0.000167	0.668785	0.000000	1.000000
	Y 224.306 {450}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	Y 360.073 { 94}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	Y 371.030 { 91}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	Zn 206.200 {463}	1/26/2017 8:04:16	1/26/2017 8:04:16	Linear	1/Conc	0.002233	3.213860	0.000000	1.000000

	Element, Wavelength and Order	Correlation	Std Error of Est	Predicted MDL	Predicted MQL	Status	Reslope		QC Norm	
							Slope	Y-int	Slope factor	Offset
	Ag 328.068 {103}	0.999664	0.000116	0.000483	0.001610	OK.	1.000000	0.000000	1	0
	Al 396.152 { 85}	0.999913	0.003983	0.011139	0.037131	OK.	1.000000	0.000000	1	0
	As 189.042 {478}	0.999817	0.000314	0.000805	0.002684	OK.	1.000000	0.000000	1	0
	Ba 455.403 { 74}	0.999854	0.014819	0.000261	0.000871	OK.	1.000000	0.000000	1	0
	Be 313.042 {108}	0.999876	0.011696	0.000094	0.000314	OK.	1.000000	0.000000	1	0
	Ca 317.933 {106}	0.999789	0.010965	0.003203	0.010675	OK.	1.000000	0.000000	1	0
	Cd 226.502 {449}	0.999717	0.010593	0.000045	0.000149	OK.	1.000000	0.000000	1	0
	Co 228.616 {447}	0.999778	0.004426	0.000102	0.000341	OK.	1.000000	0.000000	1	0
	Cr 267.716 {126}	0.999817	0.000763	0.000289	0.000963	OK.	1.000000	0.000000	1	0
	Cu 324.754 {104}	0.999994	0.000181	0.000337	0.001125	OK.	1.000000	0.000000	1	0
	Fe 259.940 {130}	0.999881	0.004460	0.002985	0.009949	OK.	1.000000	0.000000	1	0
	In 230.606 {446}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	K 766.490 { 44}	0.999843	0.003667	0.032721	0.109071	OK.	1.000000	0.000000	1	0
	Mg 279.079 {121}	0.999734	0.001146	0.021929	0.073097	OK.	1.000000	0.000000	1	0
	Mn 257.610 {131}	0.999764	0.004001	0.000055	0.000183	OK.	1.000000	0.000000	1	0
	Mo 202.030 {467}	0.999581	0.002628	0.000146	0.000487	OK.	1.000000	0.000000	1	0
	Na 589.592 { 57}	0.999904	0.010809	0.008596	0.028653	OK.	1.000000	0.000000	1	0
	Ni 231.604 {445}	0.999627	0.002770	0.000206	0.000687	OK.	1.000000	0.000000	1	0
	Pb 220.353 {453}	0.999962	0.000989	0.000513	0.001710	OK.	1.000000	0.000000	1	0
	Sb 206.833 {463}	0.999946	0.000190	0.001143	0.003809	OK.	1.000000	0.000000	1	0
	Se 196.090 {472}	0.999818	0.000209	0.001822	0.006073	OK.	1.000000	0.000000	1	0
	Si 212.412 {459}	0.997146	0.001825	0.000635	0.002117	OK.	1.000000	0.000000	1	0
	Sn 189.989 {477}	0.999339	0.001577	0.000255	0.000851	OK.	1.000000	0.000000	1	0
	Sr 407.771 { 83}	0.999650	0.032862	0.000112	0.000375	OK.	1.000000	0.000000	1	0
	Ti 334.941 {101}	0.999414	0.004201	0.000140	0.000466	OK.	1.000000	0.000000	1	0
	Tl 190.856 {477}	0.999944	0.000536	0.000706	0.002354	OK.	1.000000	0.000000	1	0
	V 292.402 {115}	0.999510	0.001673	0.000279	0.000930	OK.	1.000000	0.000000	1	0
	Y 224.306 {450}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Y 360.073 { 94}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Y 371.030 { 91}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Zn 206.200 {463}	0.999744	0.005864	0.000057	0.000190	OK.	1.000000	0.000000	1	0

Zoom In ▶ Zoom Out

Sample Name: Blank Acquired: 1/27/2017 7:48:55 Type: Cal
Method: 60102007_042011(v435) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0003**	**.0020**	**-.0011**	**-.0001**	**.0001**	**.0035**	**-.0014**	**-.0008**	**-.0001**
Stddev	.0000	.0004	.0003	.0010	.0003	.0002	.0002	.0002	.0001
%RSD	9.929	18.98	22.89	955.1	266.8	5.093	10.63	22.45	155.6
#1	.0004	.0023	-.0009	-.0011	-.0002	.0033	-.0016	-.0008	-.0002
#2	.0003	.0019	-.0014	.0009	.0005	.0034	-.0013	-.0010	-.0001
#3	.0003	.0016	-.0011	-.0001	.0001	.0036	-.0015	-.0006	.0000

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0180**	**.0015**	**.0066**	**-.0003**	**.0008**	**.0030**	**.0063**	**-.0007**	**-.0014**
Stddev	.0003	.0003	.0006	.0002	.0001	.0003	.0014	.0003	.0002
%RSD	1.400	16.74	8.574	61.39	15.92	10.22	21.77	43.73	14.90
#1	.0183	.0012	.0067	-.0002	.0008	.0032	.0048	-.0004	-.0012
#2	.0179	.0017	.0060	-.0002	.0007	.0031	.0075	-.0009	-.0013
#3	.0179	.0016	.0071	-.0006	.0009	.0026	.0064	-.0010	-.0016

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0005**	**.0006**	**.0069**	**.0008**	**.0003**	**.0015**	**-.0022**	**-.0012**	**.0015**
Stddev	.0001	.0001	.0001	.0000	.0003	.0001	.0006	.0001	.0001
%RSD	24.62	20.88	1.500	4.598	96.90	4.290	29.07	7.115	9.494
#1	.0006	.0006	.0068	.0009	.0000	.0015	-.0016	-.0011	.0015
#2	.0004	.0007	.0069	.0008	.0005	.0014	-.0029	-.0013	.0016
#3	.0007	.0005	.0070	.0009	.0006	.0015	-.0023	-.0013	.0013

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1810.9**	**4066.5**	**31909.**	**6514.4**
Stddev	2.4	8.0	41.	27.9
%RSD	.13366	.19664	.12762	.42867
#1	1808.1	4057.3	31930.	6545.8
#2	1811.7	4071.8	31934.	6492.5
#3	1812.8	4070.4	31862.	6504.7

Zoom In ▶ Zoom Out

Sample Name: LowStd Acquired: 1/27/2017 7:53:31 Type: Cal
Method: 60102007_042011(v435) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0393**	**1.565**	**.0978**	**4.015**	**4.820**	**2.438**	**2.510**	**1.394**	**.2378**
Stddev	.0004	.003	.0004	.005	.004	.003	.001	.003	.0016
%RSD	1.144	.1608	.3779	.1153	.0754	.1374	.0362	.2075	.6599
#1	.0393	1.567	.0974	4.012	4.824	2.435	2.510	1.397	.2392
#2	.0388	1.563	.0979	4.013	4.820	2.438	2.510	1.391	.2361
#3	.0397	1.564	.0981	4.021	4.817	2.442	2.511	1.395	.2382

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.4297**	**1.449**	**.8439**	**.1991**	**1.381**	**.4795**	**3.404**	**.8548**	**.4549**
Stddev	.0005	.004	.0029	.0003	.007	.0008	.002	.0008	.0012
%RSD	.1179	.2734	.3399	.1280	.4943	.1663	.0670	.0882	.2743
#1	.4302	1.445	.8442	.1994	1.381	.4799	3.405	.8555	.4543
#2	.4296	1.449	.8467	.1991	1.374	.4786	3.405	.8550	.4540
#3	.4293	1.453	.8409	.1989	1.388	.4801	3.401	.8540	.4563

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.1315**	**.0733**	**.1591**	**.1972**	**6.765**	**.8017**	**.1458**	**.3479**	**1.182**
Stddev	.0002	.0002	.0002	.0002	.007	.0040	.0008	.0012	.004
%RSD	.1682	.3230	.1105	.1094	.0984	.5027	.5812	.3337	.3754
#1	.1313	.0731	.1589	.1970	6.772	.8058	.1468	.3471	1.186
#2	.1316	.0734	.1592	.1971	6.762	.7977	.1455	.3474	1.178
#3	.1317	.0735	.1592	.1975	6.760	.8017	.1451	.3492	1.183

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1788.0**	**3994.4**	**31696.**	**6504.3**
Stddev	2.5	2.2	114.	17.6
%RSD	.14153	.05505	.35820	.27012
#1	1787.2	3992.9	31584.	6518.1
#2	1790.9	3996.9	31811.	6484.5
#3	1786.1	3993.3	31692.	6510.3

Zoom In ▶ Zoom Out

Sample Name: MidStd Acquired: 1/27/2017 7:57:08 Type: Cal
Method: 60102007_042011(v435) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.1708**	**5.857**	**.3952**	**15.67**	**18.52**	**9.061**	**9.731**	**5.437**	**.9125**
Stddev	.0011	.005	.0023	.04	.05	.011	.003	.007	.0021
%RSD	.6209	.0892	.5856	.2446	.2701	.1197	.0313	.1227	.2352
#1	.1695	5.855	.3954	15.67	18.56	9.058	9.729	5.431	.9111
#2	.1713	5.854	.3928	15.71	18.53	9.073	9.730	5.434	.9114
#3	.1715	5.863	.3974	15.64	18.46	9.052	9.735	5.444	.9150

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1.663**	**5.574**	**3.214**	**.7464**	**5.339**	**2.035**	**12.94**	**3.323**	**1.812**
Stddev	.005	.004	.005	.0005	.022	.004	.02	.003	.000
%RSD	.2975	.0761	.1420	.0682	.4141	.1769	.1568	.0983	.0161
#1	1.657	5.579	3.219	.7469	5.326	2.030	12.96	3.321	1.812
#2	1.666	5.571	3.211	.7459	5.327	2.036	12.92	3.322	1.812
#3	1.665	5.571	3.211	.7462	5.365	2.037	12.93	3.327	1.813

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.5192**	**.2914**	**.9894**	**.8414**	**28.32**	**3.408**	**.5968**	**1.471**	**4.558**
Stddev	.0005	.0002	.0018	.0009	.10	.006	.0021	.005	.006
%RSD	.0992	.0755	.1790	.1100	.3360	.1915	.3507	.3180	.1394
#1	.5197	.2917	.9891	.8422	28.42	3.401	.5956	1.467	4.554
#2	.5187	.2913	.9877	.8417	28.23	3.414	.5956	1.470	4.554
#3	.5192	.2913	.9913	.8404	28.33	3.407	.5992	1.476	4.565

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1672.1**	**3799.9**	**30706.**	**6349.4**
Stddev	2.6	5.8	138.	22.2
%RSD	.15343	.15190	.44824	.35022
#1	1674.8	3806.6	30865.	6366.7
#2	1671.9	3796.6	30634.	6357.1
#3	1669.7	3796.6	30619.	6324.3

Zoom In ▶ Zoom Out

Sample Name: HighStd Acquired: 1/27/2017 8:00:37 Type: Cal
Method: 60102007_042011(v435) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.3239**	**12.00**	**.8025**	**31.43**	**36.56**	**18.20**	**19.30**	**10.90**	**1.799**
Stddev	.0009	.00	.0023	.05	.02	.04	.02	.01	.002
%RSD	.2709	.0165	.2867	.1662	.0626	.2418	.0946	.0573	.1118
#1	.3241	12.00	.7998	31.49	36.54	18.18	19.30	10.89	1.798
#2	.3247	11.99	.8039	31.41	36.57	18.18	19.32	10.90	1.797
#3	.3230	12.00	.8037	31.40	36.58	18.25	19.28	10.89	1.801

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3.416**	**11.10**	**6.661**	**1.516**	**10.39**	**3.913**	**26.65**	**6.636**	**3.701**
Stddev	.005	.02	.001	.005	.04	.007	.02	.003	.007
%RSD	.1367	.1647	.0087	.3071	.3809	.1805	.0878	.0501	.1854
#1	3.419	11.11	6.661	1.512	10.35	3.905	26.63	6.633	3.708
#2	3.418	11.08	6.660	1.514	10.39	3.917	26.67	6.640	3.702
#3	3.411	11.11	6.660	1.521	10.43	3.918	26.65	6.636	3.694

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1.060**	**.5877**	**1.389**	**1.595**	**53.71**	**6.459**	**1.222**	**2.787**	**9.003**
Stddev	.002	.0002	.002	.001	.57	.007	.004	.003	.011
%RSD	.1683	.0405	.1619	.0691	1.056	.1164	.3241	.0893	.1238
#1	1.060	.5876	1.387	1.596	53.16	6.458	1.226	2.786	9.008
#2	1.059	.5879	1.388	1.594	53.69	6.452	1.219	2.790	9.011
#3	1.062	.5875	1.391	1.595	54.29	6.467	1.219	2.786	8.990

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1613.3**	**3740.6**	**30832.**	**6424.2**
Stddev	3.3	5.2	34.	15.0
%RSD	.20377	.13980	.10866	.23308
#1	1610.3	3744.1	30865.	6426.5
#2	1616.8	3743.2	30798.	6437.8
#3	1612.7	3734.6	30835.	6408.2

Zoom In Zoom Out

Sample Name: HSTD Acquired: 1/27/2017 8:05:12 Type: QC
Method: 60102007_042011(v435) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4990**	**81.02**	**4.077**	**4.027**	**4.020**	**81.08**	**4.041**	**4.048**	**4.033**
Stddev	.0026	.19	.005	.016	.015	.47	.010	.006	.018
%RSD	.5251	.2373	.1266	.3845	.3715	.5801	.2575	.1521	.4573
#1	.4994	81.06	4.075	4.043	4.032	81.45	4.030	4.043	4.025
#2	.4962	81.18	4.074	4.027	4.025	81.24	4.043	4.046	4.019
#3	.5014	80.81	4.083	4.012	4.003	80.56	4.050	4.055	4.054
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.069**	**80.59**	**82.08**	**81.26**	**4.022**	**4.007**	**81.66**	**4.048**	**4.100**
Stddev	.020	.38	.30	.43	.006	.007	.17	.010	.013
%RSD	.4984	.4742	.3636	.5293	.1449	.1700	.2138	.2573	.3259
#1	4.059	80.84	82.28	81.45	4.028	4.000	81.83	4.039	4.110
#2	4.055	80.77	82.22	81.56	4.022	4.012	81.67	4.047	4.085
#3	4.092	80.15	81.73	80.77	4.016	4.010	81.48	4.059	4.104
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.081**	**4.052**	**3.608**	**4.004**	**3.978**	**3.984**	**4.101**	**3.991**	**4.057**
Stddev	.015	.004	.009	.005	.065	.018	.008	.017	.017
%RSD	.3575	.0914	.2387	.1153	1.645	.4462	.2003	.4183	.4164
#1	4.077	4.048	3.605	3.999	4.042	3.977	4.103	3.989	4.040
#2	4.069	4.053	3.602	4.008	3.981	3.971	4.092	3.976	4.058
#3	4.097	4.055	3.618	4.006	3.912	4.004	4.108	4.009	4.073
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: HSTD Acquired: 1/27/2017 8:05:12 Type: QC
Method: 60102007_042011(v435) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1598.8**	**3707.4**	**30450.**	**6360.1**
Stddev	4.3	9.4	101.	36.5
%RSD	.27171	.25252	.33268	.57314
#1	1597.2	3710.9	30448.	6328.3
#2	1603.7	3714.5	30553.	6352.1
#3	1595.5	3696.8	30350.	6399.8

Zoom In Zoom Out

Sample Name: ICV Acquired: 1/27/2017 8:11:28 Type: QC
Method: 60102007_042011(v435) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2522**	**40.99**	**1.995**	**2.002**	**2.024**	**41.86**	**2.005**	**1.993**	**2.009**
Stddev	.0013	.06	.004	.005	.005	.10	.001	.003	.003
%RSD	.5017	.1461	.2110	.2319	.2573	.2374	.0644	.1247	.1542
#1	.2519	40.93	1.995	1.998	2.024	41.95	2.003	1.991	2.008
#2	.2510	41.05	1.991	2.007	2.029	41.87	2.006	1.996	2.006
#3	.2535	40.99	2.000	2.001	2.019	41.75	2.005	1.993	2.012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.953**	**40.67**	**41.02**	**41.79**	**2.035**	**1.937**	**40.68**	**1.999**	**2.025**
Stddev	.011	.05	.08	.14	.005	.006	.08	.001	.006
%RSD	.5520	.1117	.1870	.3470	.2609	.3300	.1929	.0313	.2792
#1	1.950	40.70	40.93	41.96	2.041	1.930	40.60	1.998	2.025
#2	1.944	40.70	41.08	41.73	2.033	1.941	40.76	1.999	2.019
#3	1.965	40.62	41.05	41.69	2.032	1.941	40.69	1.999	2.030
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.989**	**1.985**	**.1280**	**2.005**	**1.949**	**1.987**	**2.054**	**2.088**	**2.016**
Stddev	.003	.007	.0001	.004	.004	.004	.004	.007	.002
%RSD	.1586	.3758	.0804	.1741	.2062	.1965	.1705	.3298	.0935
#1	1.986	1.976	.1279	2.008	1.944	1.988	2.050	2.095	2.018
#2	1.992	1.989	.1281	2.001	1.952	1.983	2.057	2.082	2.014
#3	1.989	1.989	.1281	2.007	1.951	1.991	2.054	2.086	2.016
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: ICV Acquired: 1/27/2017 8:11:28 Type: QC
Method: 60102007_042011(v435) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1717.2**	**3900.5**	**31457.**	**6407.6**
Stddev	3.7	5.5	21.	24.8
%RSD	.21550	.14222	.06568	.38728
#1	1719.7	3906.0	31458.	6383.1
#2	1719.0	3894.9	31477.	6407.2
#3	1713.0	3900.7	31435.	6432.7

Zoom In Zoom Out

Sample Name: ICB Acquired: 1/27/2017 8:18:20 Type: QC
Method: 60102007_042011(v435) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0005**	**-.0031**	**-.0001**	**.0000**	**.0000**	**.0002**	**.0000**	**-.0001**	**-.0003**
Stddev	.0001	.0032	.0004	.000	.0000	.0004	.000	.0001	.0001
%RSD	27.41	102.6	428.6	339.5	194.4	180.4	149.1	143.8	41.33
#1	-.0005	-.0012	.0004	-.0002	.0000	.0004	.0000	.0000	-.0002
#2	-.0004	-.0067	-.0003	.0001	.0000	-.0002	.0000	-.0002	-.0002
#3	-.0006	-.0013	-.0003	.0000	.0001	.0005	.0000	.0000	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**-.0053**	**.0029**	**.0015**	**.0000**	**-.0001**	**.0129**	**.0000**	**.0000**
Stddev	.0003	.0020	.0256	.0075	.0000	.0001	.0018	.000	.0003
%RSD	950.5	38.25	871.6	507.1	393.8	75.96	14.14	192.0	1731.
#1	.0004	-.0044	-.0202	-.0070	.0000	.0000	.0149	.0000	-.0003
#2	-.0002	-.0038	-.0013	.0043	.0000	-.0002	.0113	.0000	.0003
#3	.0000	-.0076	.0304	.0071	.0000	-.0002	.0124	-.0001	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0008**	**.0009**	**.0003**	**-.0001**	**-.0001**	**.0001**	**-.0012**	**-.0002**	**-.0003**
Stddev	.0004	.0003	.0004	.0003	.0001	.0000	.0012	.0000	.0001
%RSD	52.30	35.37	175.2	248.6	60.30	57.58	103.7	16.67	21.26
#1	-.0012	.0007	.0006	-.0001	.0000	.0001	.0002	-.0002	-.0004
#2	-.0007	.0012	.0004	-.0004	-.0001	.0000	-.0015	-.0002	-.0004
#3	-.0004	.0007	-.0002	.0002	-.0002	.0001	-.0022	-.0002	-.0003
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: ICB Acquired: 1/27/2017 8:18:20 Type: QC
Method: 60102007_042011(v435) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1807.5**	**4026.4**	**31946.**	**6587.6**
Stddev	5.1	6.7	56.	42.1
%RSD	.28294	.16700	.17612	.63866
#1	1804.4	4031.9	31885.	6557.7
#2	1804.7	4028.3	31959.	6569.4
#3	1813.4	4018.9	31995.	6635.7

Zoom In Zoom Out

Sample Name: CRIA Acquired: 1/27/2017 8:26:16 Type: QC
Method: 60102007_042011(v435) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0081**	**.2062**	**.0099**	**.2088**	**.0052**	**1.084**	**.0053**	**.0521**	**.0104**
Stddev	.0001	.0075	.0009	.0015	.0000	.009	.0001	.0001	.0003
%RSD	.8127	3.660	9.342	.6962	.5378	.8047	1.134	.1616	2.447
#1	.0081	.2019	.0108	.2104	.0052	1.076	.0053	.0521	.0101
#2	.0081	.2019	.0090	.2075	.0053	1.083	.0052	.0520	.0104
#3	.0080	.2150	.0098	.2084	.0053	1.093	.0053	.0521	.0106
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0244**	**.3177**	**10.28**	**5.397**	**.0163**	**.0493**	**10.30**	**.0426**	**.0042**
Stddev	.0004	.0026	.02	.010	.0001	.0006	.03	.0003	.0001
%RSD	1.787	.8296	.1629	.1800	.4669	1.144	.3153	.6354	1.883
#1	.0249	.3187	10.27	5.408	.0162	.0499	10.32	.0424	.0042
#2	.0243	.3148	10.27	5.393	.0163	.0489	10.31	.0429	.0042
#3	.0240	.3198	10.30	5.391	.0163	.0491	10.26	.0426	.0043
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0053**	**.0116**	**.0430**	**.0517**	**.0101**	**.0100**	**.0105**	**.0498**	**.0216**
Stddev	.0001	.0010	.0009	.0003	.0001	.0001	.0005	.0004	.0001
%RSD	1.416	8.568	2.003	.5885	.5949	1.289	5.137	.7645	.4964
#1	.0052	.0111	.0439	.0518	.0102	.0100	.0103	.0498	.0216
#2	.0054	.0128	.0426	.0514	.0101	.0101	.0101	.0502	.0216
#3	.0054	.0111	.0423	.0520	.0101	.0098	.0111	.0494	.0218
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CRIA Acquired: 1/27/2017 8:26:16 Type: QC
Method: 60102007_042011(v435) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1839.1**	**4077.6**	**32388.**	**6572.3**
Stddev	1.6	11.2	159.	23.1
%RSD	.08604	.27442	.49193	.35121
#1	1837.8	4071.8	32392.	6596.7
#2	1838.8	4090.5	32227.	6550.8
#3	1840.9	4070.4	32545.	6569.5

Zoom In Zoom Out

Sample Name: ICSA Acquired: 1/27/2017 8:34:51 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0004**	**495.7**	**-.0002**	**.0003**	**-.0001**	**477.2**	**.0000**	**.0005**	**.0000**
Stddev	.0002	2.1	.0016	.0002	.0001	4.0	.000	.0002	.0001
%RSD	42.73	.4225	711.6	60.80	69.40	.8426	292.7	41.73	178.4
#1	-.0005	493.8	.0006	.0003	-.0001	472.7	.0000	.0006	.0000
#2	-.0005	495.4	.0008	.0005	-.0001	480.5	.0001	.0002	.0001
#3	-.0002	498.0	-.0020	.0001	-.0002	478.5	-.0002	.0006	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**183.7**	**.0278**	**528.8**	**-.0002**	**.0000**	**.1451**	**-.0001**	**-.0002**
Stddev	.0002	.3	.0206	2.2	.0001	.000	.0067	.0004	.0025
%RSD	20310.	.1750	74.05	.4206	45.61	1604.	4.611	312.7	1056.
#1	.0002	183.3	.0378	526.3	-.0001	.0000	.1400	.0002	.0013
#2	-.0002	184.0	.0041	530.5	-.0002	-.0002	.1527	-.0006	-.0032
#3	.0000	183.7	.0414	529.5	-.0003	.0001	.1425	.0000	.0011
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**.0001**	**.0214**	F **.0035**	**.0000**	**.0001**	**.0005**	**-.0007**	**-.0025**
Stddev	.001	.0048	.0008	.0008	.000	.0001	.0019	.0003	.0004
%RSD	4339.	7956.	3.855	22.58	997.3	53.06	391.1	47.42	14.40
#1	.0011	.0021	.0205	.0042	.0004	.0002	.0026	-.0006	-.0021
#2	.0005	.0035	.0221	.0037	-.0003	.0001	-.0013	-.0011	-.0025
#3	-.0016	-.0054	.0215	.0026	-.0002	.0001	.0002	-.0005	-.0028
Check ?	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.0010					
Low Limit				-.0010					

Zoom In Zoom Out

Sample Name: ICSA Acquired: 1/27/2017 8:34:51 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1553.3**	**3606.4**	**29613.**	**6118.2**
Stddev	3.3	7.8	81.	42.2
%RSD	.21037	.21765	.27410	.68915
#1	1556.4	3615.4	29520.	6166.1
#2	1549.9	3601.0	29671.	6086.8
#3	1553.6	3602.8	29648.	6101.6

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 1/27/2017 8:43:12 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9864**	**499.8**	**1.148**	**.5193**	**.5051**	**482.5**	**.9731**	**.4928**	**.5079**
Stddev	.0016	3.3	.003	.0018	.0004	1.8	.0001	.0004	.0009
%RSD	.1662	.6636	.2593	.3482	.0780	.3699	.0105	.0904	.1795
#1	.9845	503.1	1.148	.5192	.5053	482.9	.9731	.4927	.5068
#2	.9874	496.5	1.150	.5176	.5046	484.1	.9732	.4924	.5081
#3	.9872	499.8	1.144	.5212	.5053	480.6	.9730	.4933	.5086
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5556**	**183.3**	**.0267**	**525.5**	**.5087**	**.9942**	**.1808**	**.9945**	**.9990**
Stddev	.0032	.4	.0120	2.1	.0013	.0025	.0077	.0010	.0024
%RSD	.5685	.2125	45.00	.3988	.2624	.2496	4.279	.0989	.2428
#1	.5521	183.8	.0333	527.6	.5072	.9958	.1858	.9934	1.001
#2	.5582	183.1	.0128	525.5	.5095	.9914	.1719	.9953	.9993
#3	.5566	183.0	.0339	523.4	.5095	.9955	.1848	.9949	.9964
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.096**	**1.064**	**.1247**	**.9966**	**1.057**	**1.048**	**1.027**	**.4836**	**.9628**
Stddev	.001	.004	.0001	.0030	.003	.002	.003	.0008	.0020
%RSD	.1189	.3356	.0654	.3013	.2536	.1640	.2909	.1562	.2075
#1	1.098	1.063	.1246	.9945	1.055	1.049	1.023	.4828	.9612
#2	1.095	1.068	.1247	1.000	1.056	1.049	1.028	.4842	.9622
#3	1.096	1.061	.1248	.9954	1.060	1.046	1.028	.4838	.9650
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 1/27/2017 8:43:12 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1518.4**	**3542.9**	**29303.**	**6134.6**
Stddev	6.6	10.1	76.	23.8
%RSD	.43623	.28556	.25772	.38773
#1	1514.6	3536.8	29390.	6108.2
#2	1514.7	3537.3	29262.	6141.2
#3	1526.1	3554.6	29256.	6154.3

SGS ACCUTEST FA40657

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/27/2017 8:50:35 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2519	37.76	1.946	1.894	1.958	38.89	1.975	1.941	1.988
Stddev	.0014	.08	.001	.003	.004	.09	.002	.001	.006
%RSD	.5453	.2193	.0745	.1715	.2281	.2352	.1238	.0440	.2859
#1	.2528	37.67	1.945	1.891	1.953	38.79	1.978	1.942	1.993
#2	.2503	37.81	1.948	1.897	1.958	38.90	1.973	1.942	1.989
#3	.2524	37.81	1.945	1.894	1.962	38.97	1.975	1.940	1.982
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.885	38.74	38.41	39.16	2.013	1.995	38.21	1.972	1.943
Stddev	.013	.08	.06	.09	.002	.003	.09	.001	.004
%RSD	.6848	.2132	.1595	.2298	.0980	.1651	.2320	.0447	.2180
#1	1.897	38.64	38.41	39.13	2.015	1.992	38.11	1.972	1.940
#2	1.888	38.78	38.47	39.08	2.011	1.998	38.29	1.973	1.941
#3	1.871	38.79	38.35	39.26	2.012	1.995	38.21	1.971	1.948
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.935	1.934	2.481	2.020	2.032	2.058	1.944	2.059	2.010
Stddev	.004	.004	.002	.003	.006	.007	.002	.003	.004
%RSD	.2179	.2176	.0744	.1256	.2804	.3636	.1166	.1250	.2044
#1	1.934	1.930	2.480	2.018	2.027	2.062	1.944	2.062	2.014
#2	1.939	1.935	2.483	2.021	2.039	2.062	1.942	2.059	2.006
#3	1.931	1.938	2.479	2.023	2.031	2.049	1.947	2.057	2.010
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/27/2017 8:50:35 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1725.5	3893.7	31149.	6385.3
Stddev	1.6	12.5	120.	4.9
%RSD	.09214	.32075	.38508	.07684
#1	1725.1	3892.3	31019.	6379.9
#2	1724.1	3881.9	31172.	6389.5
#3	1727.2	3906.8	31255.	6386.4

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/27/2017 8:56:59 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0073	-.0014	-.0001	.0000	.0031	.0000	.0001	-.0001
Stddev	.0004	.0011	.0003	.0001	.0000	.0023	.000	.0000	.0001
%RSD	172.5	15.07	24.39	92.20	26.42	74.30	605.7	30.41	95.41
#1	-.0007	.0085	-.0013	-.0002	.0001	.0054	.0001	.0001	-.0001
#2	.0000	.0063	-.0017	.0000	.0000	.0033	.0000	.0001	.0000
#3	-.0001	.0072	-.0011	-.0002	.0000	.0007	-.0001	.0001	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0012	.0013	-.0257	.0061	.0002	-.0006	.0096	.0000	-.0002
Stddev	.0001	.0017	.0416	.0114	.0001	.0003	.0026	.000	.0003
%RSD	12.10	133.9	161.7	186.1	46.48	54.82	27.46	283.6	156.8
#1	.0013	.0006	-.0127	-.0016	.0001	-.0002	.0126	.0000	.0001
#2	.0011	.0032	.0078	.0192	.0002	-.0008	.0080	.0001	-.0004
#3	.0011	.0000	-.0722	.0008	.0003	-.0007	.0081	-.0002	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0006	.0008	-.0002	.0000	.0000	-.0015	.0000	-.0003
Stddev	.0001	.0016	.0003	.0000	.0001	.0001	.0020	.0004	.0001
%RSD	24.93	256.9	31.02	10.78	663.5	288.2	132.0	2896.	20.09
#1	-.0002	.0001	.0007	-.0002	-.0001	.0000	-.0034	.0001	-.0002
#2	-.0003	-.0006	.0007	-.0002	.0001	.0000	.0006	-.0004	-.0003
#3	-.0003	.0024	.0011	-.0002	.0000	.0002	-.0017	.0004	-.0004
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/27/2017 8:56:59 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1808.7	3991.0	31757.	6509.2
Stddev	3.1	9.5	64.	20.6
%RSD	.17181	.23726	.20284	.31703
#1	1805.2	4000.7	31693.	6485.4
#2	1810.8	3981.7	31757.	6520.3
#3	1810.2	3990.5	31822.	6521.9

Zoom In Zoom Out

Sample Name: MP31554-MB1 Acquired: 1/27/2017 9:01:15 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0007**	**.0889**	F **-.0057**	**.0340**	**-.0001**	F **2.795**	**-.0002**	**-.0002**
Stddev	.0001	.0071	.0005	.0002	.0000	.022	.0000	.0001
%RSD	15.63	8.023	8.197	.5492	22.20	.7882	17.62	46.34
#1	-.0005	.0916	-.0054	.0340	-.0001	2.779	-.0002	-.0001
#2	-.0007	.0808	-.0062	.0338	.0000	2.820	-.0002	-.0003
#3	-.0007	.0942	-.0054	.0341	-.0001	2.787	-.0003	-.0001
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			.0050			.5000		
Low Limit			-.0050			-.5000		

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0008**	**.0019**	**.1319**	**.1884**	**1.502**	F **.0120**	**-.0005**	F **3.247**
Stddev	.0003	.0001	.0026	.0239	.025	.0001	.0000	.008
%RSD	34.03	7.518	1.990	12.66	1.656	.6269	6.181	.2559
#1	.0008	.0018	.1337	.1847	1.530	.0120	-.0005	3.248
#2	.0011	.0021	.1289	.1666	1.493	.0121	-.0005	3.255
#3	.0005	.0018	.1331	.2139	1.483	.0120	-.0005	3.238
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Fail
High Limit						.0075		2.500
Low Limit						-.0075		-2.500

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0007**	F **.0027**	F **.0175**	**1.433**	F **.0285**	F **.0159**	**.0019**
Stddev	.0001	.0004	.0003	.0010	.006	.0004	.0001	.0001
%RSD	120.2	62.57	9.563	5.566	.4151	1.530	.3283	3.177
#1	.0000	.0009	.0030	.0164	1.426	.0283	.0158	.0018
#2	.0002	.0002	.0025	.0179	1.437	.0290	.0158	.0019
#3	.0001	.0009	.0026	.0182	1.435	.0283	.0159	.0018
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Fail	None	Chk Fail	Chk Fail	Chk Pass
High Limit			.0025	.0050		.0250	.0050	
Low Limit			-.0025	-.0050		-.0250	-.0050	

Zoom In Zoom Out

Sample Name: MP31554-MB1 Acquired: 1/27/2017 9:01:15 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	F **-.0189**	**-.0003**	F **.0201**
Stddev	.0004	.0001	.0001
%RSD	2.327	31.40	.6347
#1	-.0185	-.0003	.0199
#2	-.0193	-.0002	.0201
#3	-.0190	-.0002	.0201
Check ?	Chk Fail	Chk Pass	Chk Fail
High Limit	.0050		.0100
Low Limit	-.0050		-.0100

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1791.6**	**3829.3**	**31274.**	**6428.7**
Stddev	5.1	8.1	85.	37.0
%RSD	.28500	.21091	.27326	.57549
#1	1794.8	3833.4	31218.	6456.2
#2	1785.7	3820.0	31232.	6386.7
#3	1794.4	3834.5	31373.	6443.4

Zoom In Zoom Out

Sample Name: MP31554-B1 Acquired: 1/27/2017 9:05:46 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0452**	**28.68**	**2.115**	**2.097**	**.0532**	F **30.34**	**.0520**	**.5121**	**.2048**
Stddev	.0002	.07	.004	.005	.0001	.08	.0002	.0005	.0010
%RSD	.5234	.2328	.1661	.2552	.1005	.2637	.3122	.0936	.4835
#1	.0450	28.66	2.118	2.102	.0532	30.35	.0522	.5126	.2038
#2	.0454	28.63	2.111	2.091	.0532	30.41	.0521	.5116	.2057
#3	.0453	28.76	2.115	2.097	.0531	30.26	.0518	.5120	.2049
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value						25.00			
Range						20.00%			

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2536**	**28.64**	**27.44**	**28.32**	**.5401**	**.5570**	F **30.50**	**.5316**	**.4899**
Stddev	.0016	.03	.10	.18	.0004	.0009	.05	.0005	.0014
%RSD	.6281	.1129	.3772	.6319	.0670	.1677	.1745	.0950	.2864
#1	.2528	28.66	27.34	28.28	.5397	.5581	30.47	.5315	.4910
#2	.2555	28.66	27.45	28.51	.5404	.5567	30.46	.5322	.4903
#3	.2527	28.60	27.54	28.16	.5403	.5563	30.56	.5312	.4883
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value							25.00		
Range							20.00%		

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5050**	**2.156**	**.8558**	**.5679**	**.5761**	**.5482**	**1.926**	**.4953**	**.5431**
Stddev	.0013	.001	.0029	.0010	.0008	.0025	.004	.0016	.0018
%RSD	.2476	.0534	.3348	.1839	.1323	.4612	.2286	.3244	.3260
#1	.5064	2.154	.8590	.5691	.5754	.5458	1.927	.4944	.5426
#2	.5043	2.157	.8534	.5673	.5759	.5508	1.922	.4971	.5451
#3	.5043	2.155	.8549	.5673	.5769	.5478	1.931	.4943	.5417
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: MP31554-B1 Acquired: 1/27/2017 9:05:46 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1747.6**	**3799.6**	**31372.**	**6438.1**
Stddev	4.1	7.5	112.	20.5
%RSD	.23439	.19732	.35693	.31779
#1	1744.6	3792.4	31439.	6441.0
#2	1752.2	3807.4	31243.	6416.4
#3	1745.9	3799.1	31435.	6457.0

SGS ACCUTEST FA40657

Zoom In Zoom Out

Sample Name: MP31554-B2 Acquired: 1/27/2017 9:09:57 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0478**	**30.07**	**2.207**	**2.180**	**.0557**	F **31.80**	**.0543**	**.5353**	**.2183**
Stddev	.0002	.11	.003	.006	.0001	.11	.0000	.0003	.0004
%RSD	.3677	.3514	.1386	.2658	.2160	.3322	.0377	.0552	.1856
#1	.0476	30.10	2.208	2.182	.0558	31.91	.0543	.5357	.2187
#2	.0479	30.15	2.209	2.184	.0555	31.71	.0542	.5352	.2184
#3	.0479	29.95	2.204	2.174	.0556	31.76	.0543	.5351	.2179
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value						25.00			
Range						20.00%			

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2665**	**30.06**	**28.75**	**29.91**	**.5676**	**.5678**	F **31.74**	**.5568**	**.5144**
Stddev	.0005	.06	.05	.06	.0011	.0002	.09	.0008	.0013
%RSD	.1777	.2138	.1907	.2009	.1896	.0278	.2909	.1395	.2547
#1	.2666	30.08	28.77	29.90	.5680	.5679	31.85	.5559	.5159
#2	.2660	30.11	28.78	29.97	.5685	.5679	31.67	.5571	.5140
#3	.2669	29.99	28.68	29.85	.5664	.5676	31.70	.5574	.5133
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value							25.00		
Range							20.00%		

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5251**	**2.246**	**.8732**	**.5818**	**.5905**	**.5694**	**2.021**	**.5218**	**.5717**
Stddev	.0011	.006	.0005	.0012	.0014	.0004	.004	.0007	.0004
%RSD	.2141	.2497	.0626	.1980	.2321	.0683	.1781	.1367	.0761
#1	.5253	2.243	.8734	.5810	.5921	.5698	2.020	.5225	.5721
#2	.5262	2.253	.8735	.5813	.5898	.5692	2.026	.5211	.5716
#3	.5239	2.243	.8725	.5831	.5898	.5691	2.019	.5220	.5713
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: MP31554-B2 Acquired: 1/27/2017 9:09:57 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1745.3**	**3810.6**	**31164.**	**6333.2**
Stddev	1.0	7.0	4.	6.3
%RSD	.05711	.18466	.01410	.09945
#1	1745.1	3816.0	31169.	6335.1
#2	1744.5	3802.6	31162.	6326.2
#3	1746.4	3813.2	31161.	6338.3

Zoom In Zoom Out

Sample Name: FA40654-16 Acquired: 1/27/2017 9:14:08 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0008**	**1.012**	**-.0015**	**.1005**	**.0000**	**27.13**	**.0004**	**.1684**	**.1833**
Stddev	.0004	.009	.0013	.0002	.000	.05	.0000	.0002	.0007
%RSD	46.43	.8422	89.38	.2327	139.3	.2017	1.906	.1329	.3660
#1	.0010	1.019	-.0003	.1006	.0000	27.16	.0004	.1682	.1832
#2	.0010	1.003	-.0013	.1002	.0000	27.06	.0004	.1686	.1827
#3	.0004	1.014	-.0030	.1006	-.0001	27.16	.0004	.1683	.1840

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.2211**	**2.567**	**3.474**	**2.710**	**.0513**	**.0051**	**38.31**	**.1241**	**.0111**
Stddev	.0012	.002	.050	.012	.0001	.0002	.11	.0002	.0006
%RSD	.5506	.0655	1.425	.4336	.2140	4.161	.2782	.1916	5.347
#1	.2201	2.566	3.431	2.698	.0514	.0050	38.26	.1242	.0115
#2	.2225	2.567	3.463	2.710	.0512	.0050	38.24	.1242	.0114
#3	.2208	2.569	3.528	2.721	.0514	.0054	38.43	.1238	.0104

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0031**	**.0098**	**.9686**	**.0327**	**.0795**	**.0684**	**-.0074**	**.0053**	**3.258**
Stddev	.0008	.0015	.0030	.0004	.0003	.0001	.0005	.0003	.004
%RSD	26.13	15.30	.3095	1.092	.4312	.2001	7.040	4.735	.1201
#1	.0023	.0106	.9653	.0324	.0793	.0683	-.0072	.0055	3.254
#2	.0039	.0081	.9712	.0331	.0793	.0685	-.0070	.0051	3.258
#3	.0033	.0107	.9694	.0326	.0799	.0685	-.0080	.0055	3.262

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1745.6**	**3758.6**	**30830.**	**6203.3**
Stddev	9.0	13.9	29.	7.3
%RSD	.51357	.37107	.09317	.11756
#1	1749.9	3761.8	30836.	6196.7
#2	1735.3	3743.3	30798.	6202.0
#3	1751.7	3770.6	30855.	6211.1

Zoom In Zoom Out

Sample Name: FA40654-18 Acquired: 1/27/2017 9:18:30 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0001**	**.3360**	**-.0029**	**.0336**	**-.0001**	**13.49**	**-.0001**	**.0027**	**.0322**
Stddev	.0002	.0079	.0002	.0001	.0000	.04	.0000	.0000	.0004
%RSD	184.9	2.349	7.735	.2711	36.44	.3163	31.81	.8394	1.251
#1	-.0001	.3451	-.0032	.0337	-.0001	13.53	-.0001	.0027	.0326
#2	.0001	.3322	-.0028	.0336	-.0001	13.45	.0000	.0027	.0319
#3	-.0004	.3307	-.0028	.0336	.0000	13.48	-.0001	.0027	.0319

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0497**	**.5552**	**.5966**	**1.807**	**.0131**	**.0004**	**7.884**	**.0194**	**.0053**
Stddev	.0002	.0054	.0141	.019	.0001	.0001	.013	.0001	.0007
%RSD	.3313	.9757	2.366	1.031	.7341	25.50	.1634	.7248	12.94
#1	.0498	.5596	.6043	1.825	.0132	.0003	7.895	.0195	.0054
#2	.0497	.5491	.6051	1.788	.0130	.0005	7.886	.0193	.0060
#3	.0495	.5568	.5803	1.809	.0132	.0003	7.870	.0193	.0046

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0009**	**.0068**	**.6840**	**.0259**	**.0658**	**.0154**	**-.0090**	**.0017**	**.2600**
Stddev	.0010	.0012	.0006	.0003	.0002	.0002	.0008	.0004	.0009
%RSD	113.3	17.52	.0924	1.244	.2993	1.446	9.359	23.34	.3542
#1	.0011	.0074	.6836	.0255	.0660	.0154	-.0085	.0017	.2610
#2	-.0002	.0075	.6848	.0260	.0658	.0152	-.0084	.0013	.2592
#3	.0017	.0054	.6838	.0261	.0656	.0156	-.0099	.0020	.2597

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1783.5**	**3828.9**	**31207.**	**6413.4**
Stddev	6.2	7.2	30.	71.4
%RSD	.34846	.18730	.09706	1.1134
#1	1776.5	3821.2	31172.	6331.5
#2	1785.6	3829.9	31223.	6445.8
#3	1788.3	3835.5	31225.	6462.8

Zoom In Zoom Out

Sample Name: FA40654-23 Acquired: 1/27/2017 9:22:55 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0114**	**5.253**	**-.0004**	**.7974**	**.0001**	**18.80**	**.0007**	**.0538**	**.6846**
Stddev	.0003	.033	.0000	.0036	.0000	.06	.0000	.0001	.0027
%RSD	2.649	.6349	4.192	.4519	47.22	.2949	1.825	.1383	.3913
#1	.0114	5.234	-.0004	.7932	.0000	18.75	.0007	.0538	.6841
#2	.0116	5.233	-.0004	.7989	.0001	18.79	.0007	.0538	.6823
#3	.0110	5.291	-.0004	.7999	.0001	18.86	.0007	.0537	.6876

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.6733**	**6.533**	**1.239**	**2.240**	**.1211**	**.0220**	**12.03**	**.4018**	**.0581**
Stddev	.0019	.045	.020	.064	.0003	.0002	.01	.0006	.0001
%RSD	.2889	.6921	1.613	2.856	.2083	.7403	.0462	.1498	.1776
#1	.6745	6.513	1.247	2.184	.1211	.0220	12.03	.4014	.0582
#2	.6743	6.501	1.254	2.226	.1209	.0222	12.04	.4025	.0582
#3	.6710	6.584	1.216	2.309	.1214	.0219	12.04	.4015	.0580

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0158**	**.0109**	**.9337**	**.0492**	**.1167**	**.1340**	**-.0098**	**.0086**	**2.773**
Stddev	.0013	.0010	.0021	.0006	.0003	.0004	.0014	.0000	.004
%RSD	7.999	8.975	.2278	1.149	.2240	.2738	14.29	.4311	.1540
#1	.0158	.0098	.9355	.0487	.1164	.1337	-.0108	.0087	2.778
#2	.0170	.0111	.9344	.0498	.1169	.1339	-.0082	.0086	2.770
#3	.0145	.0117	.9314	.0491	.1167	.1344	-.0105	.0086	2.770

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1793.3**	**3845.9**	**31639.**	**6509.7**
Stddev	6.2	5.2	93.	43.8
%RSD	.34301	.13528	.29263	.67257
#1	1791.8	3844.5	31707.	6554.8
#2	1800.1	3851.6	31676.	6506.9
#3	1788.1	3841.5	31534.	6467.4

Zoom In Zoom Out

Sample Name: FA40654-24 Acquired: 1/27/2017 9:27:18 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0152**	**6.759**	**.0009**	**.7678**	**.0001**	**20.98**	**.0009**	**.0657**	**1.073**
Stddev	.0002	.010	.0006	.0015	.0000	.14	.0000	.0002	.002
%RSD	1.070	.1481	75.67	.1905	19.16	.6689	4.531	.3052	.1573
#1	.0152	6.750	.0004	.7694	.0001	20.84	.0009	.0658	1.071
#2	.0150	6.769	.0016	.7673	.0002	20.97	.0009	.0659	1.075
#3	.0154	6.757	.0006	.7666	.0001	21.12	.0010	.0655	1.073

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.9599**	**9.197**	**1.536**	**2.260**	**.1670**	**.0346**	**13.29**	**.6144**	**.0809**
Stddev	.0033	.012	.021	.011	.0002	.0003	.02	.0016	.0014
%RSD	.3414	.1334	1.335	.4672	.1192	.8221	.1748	.2587	1.760
#1	.9572	9.190	1.527	2.259	.1668	.0349	13.27	.6162	.0820
#2	.9635	9.212	1.559	2.270	.1672	.0345	13.27	.6138	.0793
#3	.9590	9.190	1.521	2.249	.1670	.0344	13.31	.6132	.0812

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0195**	**.0110**	**.8574**	**.0595**	**.1177**	**.2041**	**-.0090**	**.0122**	F **4.192**
Stddev	.0016	.0016	.0034	.0004	.0003	.0006	.0019	.0002	.011
%RSD	8.361	14.95	.3941	.6169	.2166	.2854	20.65	1.834	.2574
#1	.0213	.0105	.8609	.0598	.1178	.2037	-.0091	.0123	4.205
#2	.0181	.0128	.8569	.0595	.1174	.2048	-.0071	.0124	4.187
#3	.0193	.0096	.8542	.0591	.1179	.2038	-.0108	.0120	4.186

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1820.8**	**3894.0**	**32052.**	**6612.2**
Stddev	5.6	11.2	53.	35.2
%RSD	.30973	.28858	.16445	.53305
#1	1814.4	3884.2	32096.	6650.1
#2	1824.8	3891.5	31994.	6606.2
#3	1823.3	3906.3	32067.	6580.4

Zoom In Zoom Out

Sample Name: FA40600-1 Acquired: 1/27/2017 9:31:40 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0000**	**.0782**	**-.0039**	**.0235**	**-.0001**	**6.345**	F **4.351**	**-.0002**	**.0038**
Stddev	.0001	.0045	.0006	.0001	.0000	.024	.004	.0002	.0002
%RSD	524.3	5.733	15.42	.5333	25.15	.3821	.0880	83.54	4.894
#1	.0001	.0812	-.0035	.0235	-.0002	6.346	4.355	-.0004	.0036
#2	-.0001	.0731	-.0045	.0234	-.0001	6.369	4.347	-.0001	.0039
#3	.0000	.0804	-.0035	.0236	-.0002	6.321	4.352	-.0001	.0038

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0065**	**.1710**	**.2607**	**1.104**	**.0041**	**-.0014**	**1.993**	**.0024**	**.0014**
Stddev	.0003	.0005	.0255	.010	.0000	.0000	.006	.0001	.0002
%RSD	3.985	.2875	9.791	.9251	.8940	3.064	.3174	4.943	13.75
#1	.0064	.1706	.2747	1.094	.0041	-.0014	1.989	.0025	.0016
#2	.0064	.1715	.2312	1.102	.0041	-.0014	2.000	.0022	.0013
#3	.0068	.1709	.2761	1.114	.0041	-.0013	1.989	.0024	.0013

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0016**	**.0099**	**.4192**	**.0244**	**.0434**	**.0031**	**-.0084**	**.0005**	**.0363**
Stddev	.0006	.0002	.0017	.0004	.0000	.0002	.0006	.0001	.0001
%RSD	39.69	1.715	.4110	1.478	.1105	5.999	7.671	19.43	.2502
#1	.0009	.0101	.4211	.0247	.0433	.0033	-.0076	.0006	.0364
#2	.0020	.0100	.4185	.0243	.0434	.0030	-.0088	.0004	.0362
#3	.0020	.0098	.4179	.0240	.0434	.0030	-.0087	.0005	.0362

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1755.1**	**3805.1**	**30485.**	**6262.0**
Stddev	3.0	7.3	3.	20.4
%RSD	.16859	.19159	.01011	.32586
#1	1752.3	3799.9	30482.	6280.6
#2	1758.2	3801.9	30486.	6240.2
#3	1755.0	3813.4	30488.	6265.3

Zoom In Zoom Out

Sample Name: FA40600-2 Acquired: 1/27/2017 9:36:06 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0003**	**.0525**	**-.0034**	**.0267**	**-.0001**	**8.048**	**.0563**	**.0000**	**.0023**
Stddev	.0003	.0013	.0006	.0002	.0000	.039	.0001	.000	.0002
%RSD	102.0	2.505	16.89	.6655	10.58	.4784	.2134	212.8	10.03
#1	-.0004	.0531	-.0037	.0268	-.0001	8.003	.0564	.0000	.0023
#2	.0000	.0534	-.0028	.0266	-.0001	8.070	.0563	.0000	.0021
#3	-.0006	.0510	-.0038	.0269	-.0001	8.069	.0562	.0000	.0026

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0125**	**.1257**	**.3126**	**1.495**	**.0031**	**-.0014**	**2.549**	**.0013**	**.0007**
Stddev	.0002	.0018	.0176	.035	.0000	.0001	.004	.0002	.0002
%RSD	1.792	1.414	5.630	2.333	.9072	4.223	.1391	14.55	26.74
#1	.0127	.1259	.3174	1.455	.0031	-.0015	2.553	.0013	.0009
#2	.0123	.1238	.2931	1.514	.0032	-.0014	2.549	.0011	.0005
#3	.0124	.1273	.3273	1.517	.0031	-.0014	2.546	.0015	.0006

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0006**	**.0104**	**.5690**	**.0238**	**.0551**	**.0014**	**-.0088**	**.0006**	**.0251**
Stddev	.0005	.0020	.0011	.0006	.0001	.0001	.0017	.0002	.0000
%RSD	82.94	18.80	.1926	2.688	.1019	6.749	19.34	38.96	.1533
#1	.0001	.0082	.5696	.0238	.0552	.0015	-.0074	.0008	.0251
#2	.0006	.0121	.5697	.0244	.0550	.0015	-.0107	.0004	.0252
#3	.0012	.0109	.5677	.0231	.0551	.0013	-.0084	.0005	.0251

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1749.6**	**3779.6**	**30506.**	**6220.6**
Stddev	1.1	9.2	71.	36.2
%RSD	.06221	.24354	.23198	.58149
#1	1750.5	3769.9	30454.	6261.5
#2	1750.0	3788.1	30476.	6207.3
#3	1748.4	3780.9	30586.	6192.8

Zoom In Zoom Out

Sample Name: FA40600-3 Acquired: 1/27/2017 9:40:33 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0005**	**.0412**	**-.0035**	**.0498**	**-.0001**	**6.163**	**.1301**	**-.0002**	**.0045**
Stddev	.0002	.0034	.0010	.0002	.0000	.008	.0000	.0001	.0001
%RSD	46.16	8.357	30.06	.4830	18.62	.1344	.0041	39.10	2.941
#1	-.0003	.0385	-.0044	.0501	-.0001	6.171	.1301	-.0001	.0045
#2	-.0003	.0402	-.0036	.0498	-.0001	6.163	.1301	-.0002	.0046
#3	-.0007	.0451	-.0024	.0496	-.0001	6.154	.1301	-.0001	.0044

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0028**	**.0657**	**.3028**	**1.121**	**.0024**	**-.0015**	**2.788**	**.0018**	**.0010**
Stddev	.0002	.0004	.0142	.016	.0000	.0001	.010	.0001	.0006
%RSD	8.786	.6582	4.678	1.396	.2414	7.416	.3730	7.030	66.53
#1	.0025	.0656	.2919	1.133	.0024	-.0015	2.799	.0017	.0013
#2	.0030	.0662	.2977	1.126	.0024	-.0017	2.787	.0018	.0013
#3	.0027	.0654	.3188	1.103	.0024	-.0014	2.778	.0020	.0002

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0007**	**.0108**	**.3946**	**.0223**	**.0703**	**.0009**	**-.0084**	**.0018**	**.0923**
Stddev	.0006	.0012	.0008	.0002	.0001	.0001	.0013	.0001	.0001
%RSD	84.25	11.00	.2094	.7009	.2110	10.55	15.53	5.907	.1099
#1	.0005	.0121	.3952	.0223	.0704	.0008	-.0091	.0018	.0923
#2	.0002	.0099	.3936	.0221	.0704	.0009	-.0069	.0017	.0922
#3	.0013	.0103	.3949	.0224	.0701	.0010	-.0092	.0019	.0924

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1795.7**	**3870.8**	**31311.**	**6503.3**
Stddev	5.2	16.5	98.	49.5
%RSD	.28795	.42664	.31307	.76142
#1	1799.1	3883.0	31408.	6446.9
#2	1798.3	3877.2	31212.	6523.2
#3	1789.8	3852.0	31311.	6539.8

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/27/2017 9:45:00 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2539**	**37.77**	**1.979**	**1.923**	**1.960**	**39.15**	**1.996**	**1.963**	**1.962**
Stddev	.0003	.07	.002	.004	.007	.18	.003	.002	.007
%RSD	.1348	.1747	.0886	.2075	.3686	.4548	.1431	.0887	.3847
#1	.2541	37.72	1.978	1.923	1.961	39.07	1.997	1.962	1.968
#2	.2542	37.84	1.978	1.927	1.966	39.36	1.993	1.962	1.965
#3	.2535	37.74	1.981	1.919	1.952	39.03	1.998	1.965	1.953
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.888**	**38.72**	**38.65**	**38.79**	**2.022**	**2.032**	**38.63**	**2.000**	**1.950**
Stddev	.003	.11	.06	.32	.008	.003	.07	.001	.004
%RSD	.1545	.2716	.1579	.8132	.4102	.1624	.1740	.0616	.1840
#1	1.886	38.64	38.62	38.56	2.031	2.032	38.62	1.999	1.946
#2	1.891	38.84	38.72	39.15	2.017	2.029	38.70	1.998	1.950
#3	1.886	38.69	38.60	38.67	2.017	2.036	38.57	2.001	1.954
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.976**	**1.969**	**2.529**	**2.036**	**2.040**	**2.043**	**1.963**	**2.063**	**2.031**
Stddev	.002	.006	.002	.002	.005	.004	.008	.008	.003
%RSD	.1204	.3182	.0747	.0942	.2483	.1692	.3850	.3742	.1385
#1	1.976	1.963	2.527	2.037	2.040	2.047	1.955	2.072	2.035
#2	1.973	1.969	2.530	2.034	2.044	2.043	1.970	2.057	2.029
#3	1.978	1.976	2.530	2.037	2.034	2.040	1.965	2.060	2.031
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/27/2017 9:45:00 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1738.9**	**3892.2**	**31523.**	**6530.2**
Stddev	.5	4.2	85.	32.6
%RSD	.02979	.10794	.27085	.49899
#1	1739.3	3888.4	31440.	6557.6
#2	1738.9	3896.7	31611.	6494.2
#3	1738.3	3891.4	31519.	6538.7

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/27/2017 9:49:11 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**-.0021**	**-.0006**	**.0000**	**.0000**	**-.0017**	**.0000**	**.0000**	**.0000**
Stddev	.000	.0013	.0008	.0001	.000	.0015	.000	.000	.0001
%RSD	838.4	59.83	120.0	4139.	300.1	85.98	61.41	79.56	310.8
#1	.0003	-.0009	-.0011	-.0001	.0000	.0000	-.0001	.0000	.0002
#2	.0000	-.0020	-.0011	-.0001	.0000	-.0026	.0000	.0000	.0000
#3	-.0003	-.0034	.0002	.0002	.0000	-.0026	.0000	-.0001	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0009**	**.0005**	**-.0511**	**.0194**	**-.0001**	**.0003**	**.0064**	**-.0001**	**-.0005**
Stddev	.0004	.0040	.0225	.0030	.0001	.0004	.0069	.0002	.0009
%RSD	45.60	775.3	44.13	15.67	82.55	106.3	108.1	250.1	191.0
#1	.0005	.0051	-.0744	.0193	-.0001	.0007	.0138	-.0001	-.0013
#2	.0009	-.0025	-.0294	.0165	-.0001	.0003	.0002	-.0004	-.0007
#3	.0013	-.0011	-.0494	.0226	.0000	.0000	.0052	.0001	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0001**	**.0014**	**-.0002**	**.0000**	**.0001**	**-.0015**	**-.0001**	**-.0004**
Stddev	.0009	.0018	.0004	.0004	.000	.0001	.0006	.0001	.0000
%RSD	292.8	1957.	27.25	206.9	145.3	145.7	36.86	108.8	3.992
#1	-.0002	-.0017	.0018	.0000	-.0001	.0001	-.0009	-.0003	-.0004
#2	.0014	.0019	.0011	.0000	-.0001	.0002	-.0017	-.0001	-.0004
#3	-.0002	.0000	.0011	-.0007	.0000	-.0001	-.0020	.0000	-.0004
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/27/2017 9:49:11 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1832.1**	**4035.0**	**32001.**	**6624.9**
Stddev	2.1	3.0	78.	37.4
%RSD	.11461	.07486	.24334	.56521
#1	1831.9	4038.4	31977.	6587.6
#2	1830.1	4033.8	31938.	6624.6
#3	1834.3	4032.8	32088.	6662.5

Zoom In Zoom Out

Sample Name: FA40600-4 Acquired: 1/27/2017 9:53:43 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0200**	**.6027**	**-.0038**	**.0601**	**.0000**	**8.157**	**F 4.492**	**.0007**	**.0188**
Stddev	.0002	.0060	.0011	.0001	.000	.020	.010	.0001	.0003
%RSD	1.020	.9915	28.22	.2372	74.47	.2395	.2206	14.62	1.523
#1	.0198	.5988	-.0039	.0601	.0000	8.169	4.486	.0006	.0189
#2	.0202	.5997	-.0026	.0603	.0000	8.167	4.487	.0008	.0185
#3	.0199	.6096	-.0048	.0600	.0000	8.134	4.503	.0006	.0190

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0217**	**1.118**	**4.490**	**1.713**	**.0102**	**.0100**	**2.440**	**.0266**	**.0040**
Stddev	.0003	.005	.010	.010	.0000	.0004	.004	.0001	.0006
%RSD	1.226	.4611	.2320	.5997	.3307	3.673	.1434	.3206	16.17
#1	.0218	1.116	4.479	1.717	.0102	.0103	2.441	.0265	.0045
#2	.0214	1.124	4.499	1.721	.0103	.0096	2.437	.0266	.0042
#3	.0219	1.114	4.493	1.702	.0102	.0101	2.443	.0267	.0032

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0038**	**.0106**	**.7172**	**.0328**	**.0724**	**.0159**	**-.0085**	**.0025**	**.1600**
Stddev	.0003	.0007	.0014	.0003	.0002	.0002	.0008	.0002	.0004
%RSD	8.165	6.863	.1986	.9238	.2793	1.0000	9.705	7.465	.2697
#1	.0040	.0101	.7184	.0325	.0726	.0161	-.0086	.0024	.1601
#2	.0035	.0103	.7156	.0331	.0723	.0158	-.0093	.0024	.1596
#3	.0040	.0114	.7175	.0326	.0722	.0158	-.0076	.0027	.1604

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1798.0**	**3886.4**	**31242.**	**6404.1**
Stddev	6.7	5.3	107.	31.9
%RSD	.37294	.13530	.34398	.49870
#1	1790.4	3880.9	31279.	6378.6
#2	1803.0	3886.9	31327.	6393.7
#3	1800.8	3891.4	31122.	6439.9

Zoom In Zoom Out

Sample Name: FA40600-5 Acquired: 1/27/2017 9:58:09 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0002**	**.0517**	**-.0033**	**.0271**	**-.0001**	**7.997**	**.1082**	**.0001**	**.0026**
Stddev	.0002	.0023	.0007	.0003	.0000	.024	.0007	.0001	.0001
%RSD	114.8	4.372	21.06	.9918	27.06	.3023	.6455	162.4	3.139
#1	-.0004	.0529	-.0027	.0274	-.0001	8.025	.1090	.0000	.0026
#2	-.0002	.0490	-.0032	.0271	-.0001	7.982	.1080	.0002	.0027
#3	.0000	.0530	-.0040	.0269	-.0001	7.984	.1077	.0000	.0026

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0144**	**.1150**	**.3154**	**1.522**	**.0030**	**-.0006**	**2.387**	**.0013**	**.0007**
Stddev	.0003	.0028	.0120	.022	.0000	.0002	.012	.0001	.0008
%RSD	2.098	2.440	3.802	1.473	1.030	37.11	.5111	7.881	112.8
#1	.0142	.1167	.3144	1.547	.0030	-.0008	2.397	.0014	.0016
#2	.0148	.1165	.3039	1.516	.0029	-.0007	2.373	.0012	.0000
#3	.0142	.1117	.3278	1.503	.0030	-.0004	2.390	.0012	.0006

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0015**	**.0249**	**.5372**	**.0258**	**.0537**	**.0016**	**-.0098**	**.0005**	**.0177**
Stddev	.0002	.0011	.0016	.0002	.0001	.0000	.0004	.0001	.0001
%RSD	16.50	4.324	.3057	.8541	.1580	1.659	4.005	23.04	.4323
#1	.0017	.0260	.5389	.0257	.0538	.0016	-.0100	.0005	.0178
#2	.0013	.0247	.5371	.0257	.0537	.0016	-.0100	.0004	.0177
#3	.0013	.0239	.5356	.0261	.0536	.0016	-.0093	.0006	.0176

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1753.1**	**3783.7**	**30350.**	**6254.8**
Stddev	6.1	14.4	14.	10.3
%RSD	.34866	.37995	.04535	.16525
#1	1746.6	3767.6	30355.	6258.0
#2	1753.8	3788.3	30334.	6243.2
#3	1758.8	3795.2	30360.	6263.1

Zoom In Zoom Out

Sample Name: FA40600-6 Acquired: 1/27/2017 10:02:36 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0001**	**.0783**	**-.0016**	**.0370**	**-.0001**	**7.440**	**.1082**	**.0002**	**.0022**
Stddev	.0002	.0055	.0003	.0001	.0000	.017	.0002	.0000	.0003
%RSD	162.2	7.079	20.93	.2336	19.70	.2249	.1567	24.36	11.38
#1	-.0002	.0791	-.0020	.0371	-.0001	7.456	.1080	.0002	.0025
#2	.0001	.0725	-.0013	.0370	-.0001	7.439	.1084	.0002	.0021
#3	-.0004	.0835	-.0015	.0369	-.0001	7.423	.1081	.0001	.0021

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0158**	**.1266**	**.2906**	**1.423**	**.0030**	**-.0011**	**2.665**	**.0018**	**.0008**
Stddev	.0003	.0012	.0217	.019	.0001	.0001	.008	.0001	.0007
%RSD	2.147	.9774	7.472	1.327	2.253	6.599	.3081	3.703	86.68
#1	.0156	.1265	.3095	1.417	.0030	-.0010	2.672	.0019	.0000
#2	.0157	.1279	.2955	1.408	.0031	-.0012	2.656	.0018	.0013
#3	.0162	.1254	.2669	1.444	.0030	-.0012	2.667	.0017	.0011

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0001**	**.0227**	**.4382**	**.0241**	**.0456**	**.0021**	**-.0073**	**.0004**	**.0508**
Stddev	.0011	.0012	.0019	.0005	.0001	.0001	.0003	.0003	.0001
%RSD	815.4	5.399	.4246	1.940	.2497	2.703	4.544	28.95	.2296
#1	.0002	.0223	.4369	.0237	.0457	.0021	-.0070	.0006	.0507
#2	.0008	.0240	.4403	.0246	.0456	.0021	-.0072	.0003	.0509
#3	-.0014	.0217	.4373	.0240	.0454	.0022	-.0077	.0004	.0507

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1803.5**	**3869.6**	**31509.**	**6443.6**
Stddev	3.9	9.7	45.	13.1
%RSD	.21569	.24984	.14408	.20342
#1	1806.7	3877.7	31548.	6439.8
#2	1799.2	3858.9	31460.	6458.2
#3	1804.5	3872.3	31521.	6432.8

Zoom In Zoom Out

Sample Name: FA40600-7 Acquired: 1/27/2017 10:07:03 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0002**	**.2029**	**-.0034**	**.0307**	**-.0001**	**8.276**	**.0250**	**-.0001**	**.0038**
Stddev	.0002	.0052	.0005	.0005	.0000	.014	.0002	.0001	.0001
%RSD	69.61	2.587	13.86	1.656	12.66	.1718	.7954	111.8	2.584
#1	.0001	.1980	-.0039	.0305	-.0001	8.271	.0248	-.0002	.0038
#2	.0002	.2084	-.0032	.0304	-.0001	8.292	.0251	.0000	.0039
#3	.0004	.2022	-.0030	.0313	-.0001	8.265	.0252	-.0001	.0037

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0078**	**.3353**	**.3642**	**1.197**	**.0073**	**-.0008**	**3.074**	**.0021**	**.0024**
Stddev	.0001	.0022	.0239	.025	.0000	.0001	.007	.0001	.0007
%RSD	1.628	.6619	6.576	2.070	.2168	16.64	.2345	2.487	30.69
#1	.0077	.3375	.3907	1.172	.0073	-.0009	3.066	.0021	.0026
#2	.0079	.3354	.3578	1.198	.0073	-.0009	3.080	.0021	.0030
#3	.0077	.3330	.3441	1.221	.0073	-.0006	3.077	.0020	.0016

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0009**	**.0084**	**.7445**	**.0240**	**.0523**	**.0093**	**-.0088**	**.0011**	**.0394**
Stddev	.0006	.0007	.0012	.0003	.0001	.0001	.0015	.0002	.0002
%RSD	69.43	7.805	.1558	1.195	.2149	1.046	16.78	17.14	.5696
#1	.0002	.0090	.7442	.0237	.0525	.0093	-.0072	.0009	.0394
#2	.0012	.0077	.7435	.0242	.0523	.0094	-.0100	.0012	.0392
#3	.0013	.0083	.7458	.0240	.0523	.0092	-.0093	.0011	.0397

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1759.6**	**3783.1**	**30768.**	**6361.8**
Stddev	3.2	4.4	38.	16.2
%RSD	.18021	.11694	.12451	.25461
#1	1763.1	3785.6	30730.	6379.7
#2	1758.6	3785.6	30806.	6348.3
#3	1757.0	3778.0	30768.	6357.3

Zoom In Zoom Out

Sample Name: FA40600-8 Acquired: 1/27/2017 10:11:29 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0001**	**.0887**	**-.0032**	**.0463**	**-.0001**	**7.738**	**.0445**	**.0000**	**.0060**
Stddev	.0001	.0061	.0008	.0002	.0000	.028	.0001	.0001	.0002
%RSD	214.1	6.904	23.41	.3447	19.29	.3577	.2750	201.2	3.935
#1	.0000	.0900	-.0041	.0461	-.0001	7.725	.0445	.0001	.0059
#2	-.0002	.0940	-.0028	.0463	-.0001	7.770	.0444	.0000	.0058
#3	.0000	.0820	-.0028	.0464	-.0001	7.719	.0446	.0000	.0062

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0134**	**.1877**	**.2830**	**1.537**	**.0039**	**-.0008**	**2.811**	**.0031**	**.0011**
Stddev	.0004	.0030	.0109	.008	.0000	.0001	.005	.0001	.0007
%RSD	2.632	1.604	3.863	.5032	.6763	14.09	.1710	3.213	63.66
#1	.0137	.1874	.2910	1.528	.0039	-.0010	2.806	.0030	.0009
#2	.0135	.1908	.2706	1.542	.0039	-.0007	2.811	.0032	.0005
#3	.0130	.1848	.2875	1.542	.0039	-.0008	2.816	.0032	.0018

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0019**	**.0085**	**.6002**	**.0220**	**.0673**	**.0029**	**-.0098**	**.0017**	**.0260**
Stddev	.0005	.0001	.0009	.0004	.0002	.0001	.0008	.0002	.0002
%RSD	27.94	1.664	.1568	1.849	.3223	2.004	7.673	9.933	.5937
#1	.0016	.0085	.6004	.0216	.0670	.0029	-.0095	.0015	.0261
#2	.0015	.0084	.5992	.0220	.0674	.0029	-.0107	.0017	.0258
#3	.0025	.0087	.6010	.0225	.0674	.0030	-.0094	.0018	.0260

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1765.4**	**3807.7**	**30727.**	**6320.7**
Stddev	4.4	3.1	178.	24.4
%RSD	.25076	.08068	.57908	.38574
#1	1765.9	3804.2	30524.	6314.9
#2	1769.5	3810.0	30852.	6299.7
#3	1760.7	3808.9	30806.	6347.4

Zoom In Zoom Out

Sample Name: FA40600-9 Acquired: 1/27/2017 10:15:56 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0005**	**.0282**	**-.0036**	**.0391**	**-.0001**	**5.122**	**.0161**	**-.0002**	**.0031**
Stddev	.0003	.0053	.0007	.0001	.0000	.012	.0001	.0000	.0000
%RSD	64.47	18.75	18.32	.3774	18.49	.2312	.5121	17.86	1.460
#1	-.0007	.0239	-.0032	.0392	-.0001	5.125	.0160	-.0002	.0030
#2	-.0001	.0341	-.0043	.0389	-.0001	5.132	.0162	-.0002	.0031
#3	-.0007	.0266	-.0032	.0391	-.0001	5.109	.0161	-.0002	.0031

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0030**	**.0790**	**.1952**	**1.002**	**.0027**	**-.0014**	**3.414**	**.0012**	**.0005**
Stddev	.0004	.0024	.0245	.053	.0000	.0001	.006	.0001	.0009
%RSD	12.61	3.015	12.55	5.335	1.590	9.672	.1656	8.542	194.0
#1	.0027	.0776	.1961	.9821	.0027	-.0013	3.409	.0013	.0016
#2	.0029	.0818	.2192	1.062	.0027	-.0014	3.414	.0012	.0001
#3	.0034	.0777	.1702	.9606	.0026	-.0016	3.420	.0011	-.0002

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0011**	**.0085**	**.3969**	**.0223**	**.0569**	**.0012**	**-.0097**	**.0015**	**.0215**
Stddev	.0014	.0010	.0009	.0003	.0002	.0001	.0007	.0002	.0001
%RSD	134.3	11.87	.2249	1.217	.3036	5.064	7.062	15.48	.5760
#1	.0008	.0085	.3959	.0221	.0570	.0012	-.0105	.0014	.0214
#2	-.0002	.0075	.3972	.0221	.0567	.0012	-.0095	.0017	.0216
#3	.0026	.0095	.3977	.0226	.0570	.0013	-.0092	.0013	.0215

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1799.9**	**3892.8**	**31335.**	**6359.4**
Stddev	1.4	11.0	63.	33.8
%RSD	.08005	.28179	.19997	.53098
#1	1800.2	3902.4	31388.	6362.1
#2	1798.4	3880.8	31352.	6324.4
#3	1801.2	3895.2	31266.	6391.8

Zoom In Zoom Out

Sample Name: FA40600-10 Acquired: 1/27/2017 10:20:25 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	**-.0003**	**.9164**	**-.0040**	**.0593**	**-.0001**	**13.96**	F **6.188**	**.0008**
Stddev	.0003	.0019	.0003	.0001	.0000	.02	.022	.0001
%RSD	79.36	.2020	7.055	.1949	37.12	.1158	.3573	16.35
#1	-.0002	.9184	-.0042	.0594	-.0001	13.98	6.208	.0009
#2	-.0006	.9147	-.0037	.0592	-.0001	13.96	6.192	.0006
#3	-.0001	.9160	-.0042	.0594	-.0001	13.95	6.164	.0009

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	**.0551**	**.0351**	**1.533**	**1.056**	**1.793**	**.0186**	**.0023**	**3.467**
Stddev	.0002	.0003	.006	.009	.027	.0000	.0002	.014
%RSD	.3756	.9278	.3700	.9037	1.482	.2504	6.609	.3918
#1	.0549	.0355	1.531	1.063	1.762	.0186	.0023	3.478
#2	.0554	.0349	1.528	1.060	1.808	.0185	.0025	3.452
#3	.0551	.0351	1.539	1.045	1.808	.0186	.0022	3.472

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	**.0274**	**.0019**	**.0014**	**.0109**	**1.281**	**.0293**	**.0692**	**.0546**
Stddev	.0000	.0006	.0008	.0007	.007	.0002	.0002	.0002
%RSD	.1061	30.80	60.40	6.676	.5592	.8109	.3265	.3241
#1	.0274	.0019	.0022	.0107	1.289	.0296	.0695	.0544
#2	.0274	.0014	.0006	.0103	1.280	.0292	.0690	.0546
#3	.0274	.0025	.0013	.0117	1.275	.0292	.0692	.0547

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	F **-.0102**	**.0036**	**.0521**
Stddev	.0000	.0001	.0002
%RSD	.3725	1.705	.4658
#1	-.0102	.0036	.0523
#2	-.0102	.0036	.0519
#3	-.0102	.0035	.0521

Zoom In Zoom Out

Sample Name: FA40600-10 Acquired: 1/27/2017 10:20:25 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1767.8**	**3807.5**	**31013.**	**6320.2**
Stddev	10.6	14.5	34.	43.0
%RSD	.60022	.38099	.10803	.68098
#1	1755.6	3790.8	31000.	6367.9
#2	1774.4	3816.1	31052.	6308.5
#3	1773.4	3815.8	30989.	6284.3

Zoom In Zoom Out

Sample Name: FA40600-11 Acquired: 1/27/2017 10:24:47 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0001**	**.0667**	**-.0029**	**.0222**	**-.0001**	**6.490**	**.0901**	**-.0002**	**.0032**
Stddev	.0001	.0007	.0008	.0002	.0000	.021	.0001	.0001	.0002
%RSD	125.2	.9822	26.93	.9980	21.44	.3209	.1153	43.86	7.802
#1	-.0001	.0665	-.0032	.0223	-.0001	6.511	.0900	-.0001	.0034
#2	-.0002	.0662	-.0020	.0223	-.0001	6.469	.0901	-.0002	.0032
#3	.0000	.0674	-.0034	.0219	-.0001	6.491	.0902	-.0003	.0029

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0063**	**.2092**	**.2348**	**1.068**	**.0037**	**-.0001**	**2.043**	**.0019**	**.0009**
Stddev	.0003	.0020	.0125	.016	.0001	.0001	.007	.0001	.0008
%RSD	4.209	.9337	5.321	1.455	1.571	106.6	.3561	2.741	87.18
#1	.0061	.2082	.2221	1.085	.0037	.0000	2.047	.0019	.0017
#2	.0066	.2080	.2470	1.064	.0037	-.0003	2.047	.0018	.0009
#3	.0064	.2115	.2354	1.055	.0038	-.0001	2.035	.0019	.0001

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0012**	**.0061**	**.4736**	**.0205**	**.0447**	**.0025**	**-.0077**	**.0005**	**.0246**
Stddev	.0009	.0033	.0008	.0001	.0001	.0001	.0003	.0002	.0001
%RSD	73.02	54.90	.1771	.5638	.2115	2.549	3.769	44.48	.5224
#1	.0020	.0030	.4744	.0205	.0446	.0025	-.0076	.0005	.0245
#2	.0002	.0056	.4727	.0207	.0448	.0026	-.0080	.0007	.0246
#3	.0014	.0096	.4736	.0204	.0448	.0024	-.0075	.0003	.0248

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1786.0**	**3857.8**	**31304.**	**6499.3**
Stddev	.2	3.1	80.	30.0
%RSD	.01113	.08011	.25428	.46200
#1	1785.9	3859.0	31342.	6468.3
#2	1785.9	3854.2	31357.	6528.2
#3	1786.3	3860.0	31213.	6501.4

Zoom In Zoom Out

Sample Name: FA40600-12 Acquired: 1/27/2017 10:29:15 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0003**	**.0816**	**-.0027**	**.0295**	**-.0001**	**7.889**	**.1518**	**.0001**	**.0029**
Stddev	.0001	.0041	.0008	.0004	.0000	.012	.0002	.0001	.0003
%RSD	32.55	4.986	30.68	1.419	43.68	.1454	.1376	109.8	9.895
#1	.0002	.0862	-.0030	.0296	-.0001	7.880	.1517	.0001	.0026
#2	.0004	.0802	-.0018	.0299	-.0001	7.885	.1521	.0001	.0031
#3	.0003	.0784	-.0034	.0291	.0000	7.902	.1517	.0000	.0030

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0141**	**.2029**	**.4356**	**1.462**	**.0050**	**-.0009**	**2.281**	**.0143**	**.0010**
Stddev	.0004	.0019	.0080	.043	.0000	.0001	.005	.0001	.0003
%RSD	3.006	.9375	1.840	2.913	.6128	9.423	.2337	.8890	28.65
#1	.0137	.2048	.4307	1.423	.0050	-.0008	2.284	.0144	.0010
#2	.0145	.2010	.4449	1.456	.0050	-.0008	2.283	.0142	.0008
#3	.0141	.2031	.4313	1.507	.0050	-.0010	2.274	.0144	.0014

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0008**	**.0076**	**.5809**	**.0255**	**.0550**	**.0031**	**-.0083**	**.0007**	**.0378**
Stddev	.0009	.0014	.0023	.0002	.0003	.0000	.0003	.0003	.0002
%RSD	106.8	18.26	.3890	.8826	.5323	.5689	3.286	35.02	.5626
#1	-.0001	.0061	.5783	.0257	.0551	.0031	-.0082	.0006	.0376
#2	.0009	.0089	.5820	.0256	.0551	.0031	-.0086	.0006	.0379
#3	.0016	.0078	.5823	.0253	.0546	.0031	-.0082	.0010	.0380

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1804.0**	**3863.5**	**31625.**	**6516.8**
Stddev	3.2	8.1	34.	35.3
%RSD	.17989	.20881	.10645	.54095
#1	1807.8	3870.7	31586.	6514.9
#2	1802.5	3854.8	31641.	6552.9
#3	1801.9	3864.9	31648.	6482.5

Zoom In Zoom Out

Sample Name: FA40600-13 Acquired: 1/27/2017 10:33:41 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0001**	**.1695**	**-.0036**	**.0432**	**-.0001**	**6.815**	**1.107**	**.0000**	**.0051**
Stddev	.0002	.0080	.0005	.0002	.0001	.016	.002	.000	.0002
%RSD	164.2	4.736	13.24	.5289	62.65	.2345	.1586	71.78	4.208
#1	-.0002	.1772	-.0042	.0435	-.0002	6.797	1.107	.0000	.0049
#2	-.0002	.1699	-.0033	.0431	-.0001	6.823	1.108	.0000	.0052
#3	.0001	.1612	-.0034	.0430	.0000	6.825	1.105	-.0001	.0053

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0096**	**.4047**	**.3129**	**1.299**	**.0079**	**.0003**	**2.124**	**.0037**	**.0012**
Stddev	.0002	.0023	.0202	.021	.0000	.0001	.009	.0002	.0008
%RSD	2.505	.5599	6.460	1.640	.5447	35.23	.4155	4.843	69.51
#1	.0093	.4023	.3212	1.276	.0079	.0004	2.134	.0039	.0006
#2	.0098	.4051	.3276	1.303	.0078	.0002	2.118	.0035	.0008
#3	.0097	.4067	.2898	1.317	.0079	.0003	2.120	.0038	.0022

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0024**	**.0095**	**.5232**	**.0264**	**.0594**	**.0065**	**-.0089**	**.0018**	**.2010**
Stddev	.0007	.0010	.0026	.0002	.0002	.0001	.0004	.0003	.0002
%RSD	28.14	10.60	.4934	.8674	.3049	1.019	4.716	14.11	.0914
#1	.0025	.0091	.5234	.0266	.0596	.0066	-.0092	.0021	.2009
#2	.0017	.0107	.5257	.0261	.0593	.0065	-.0091	.0017	.2012
#3	.0030	.0088	.5205	.0264	.0595	.0065	-.0084	.0016	.2010

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1756.2**	**3800.5**	**30504.**	**6270.8**
Stddev	3.7	12.6	76.	34.1
%RSD	.20979	.33051	.25030	.54457
#1	1752.0	3787.2	30581.	6310.0
#2	1758.2	3802.1	30429.	6254.2
#3	1758.5	3812.2	30503.	6248.1

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/27/2017 10:38:06 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2639**	**39.04**	**2.064**	**1.954**	**2.039**	**40.83**	**2.093**	**2.051**	**2.088**
Stddev	.0005	.22	.003	.012	.013	.25	.006	.005	.006
%RSD	.1853	.5567	.1550	.6043	.6438	.6133	.3101	.2421	.2767
#1	.2640	38.87	2.062	1.941	2.024	40.54	2.096	2.050	2.085
#2	.2634	39.28	2.063	1.963	2.050	41.01	2.086	2.046	2.084
#3	.2644	38.97	2.068	1.958	2.042	40.93	2.098	2.056	2.095
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.953**	**40.09**	**39.94**	**41.14**	**2.133**	**2.109**	**39.78**	**2.097**	**2.051**
Stddev	.010	.20	.26	.09	.002	.007	.26	.006	.001
%RSD	.4907	.4902	.6548	.2240	.0882	.3159	.6589	.2865	.0406
#1	1.950	39.87	39.68	41.04	2.132	2.105	39.49	2.094	2.050
#2	1.945	40.26	40.20	41.21	2.132	2.106	40.00	2.092	2.051
#3	1.964	40.13	39.94	41.17	2.135	2.117	39.85	2.103	2.051
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.059**	**2.048**	**2.633**	**2.135**	**2.109**	**2.160**	**2.057**	**2.176**	**2.147**
Stddev	.007	.011	.013	.007	.014	.006	.009	.005	.008
%RSD	.3607	.5126	.5042	.3217	.6543	.2994	.4507	.2460	.3571
#1	2.056	2.040	2.630	2.141	2.096	2.161	2.048	2.177	2.150
#2	2.052	2.044	2.622	2.128	2.124	2.154	2.066	2.171	2.139
#3	2.067	2.060	2.648	2.136	2.108	2.166	2.056	2.182	2.153
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/27/2017 10:38:06 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1676.8**	**3760.6**	**30284.**	**6188.3**
Stddev	2.2	9.6	47.	25.6
%RSD	.12965	.25569	.15603	.41427
#1	1678.0	3760.8	30339.	6217.5
#2	1674.3	3770.1	30261.	6169.7
#3	1678.1	3750.8	30253.	6177.6

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/27/2017 10:42:16 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**.0047**	**-.0003**	**.0000**	**.0001**	**-.0007**	**.0000**	**-.0001**	**-.0001**
Stddev	.0002	.0027	.0004	.0001	.0001	.0009	.0000	.0001	.0002
%RSD	639.7	57.73	154.8	346.9	71.34	123.6	129.2	108.1	145.1
#1	.0002	.0079	.0001	-.0001	.0000	-.0007	.0000	-.0001	-.0003
#2	-.0001	.0029	-.0003	.0002	.0001	-.0015	.0000	.0000	-.0002
#3	-.0001	.0034	-.0006	.0001	.0001	.0002	.0000	.0000	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0012**	**.0020**	**-.0344**	**.0125**	**.0000**	**.0007**	**.0080**	**.0000**	**-.0005**
Stddev	.0003	.0014	.0337	.0104	.0000	.0005	.0039	.000	.0002
%RSD	25.07	67.40	97.89	83.21	70.08	76.34	48.60	525.1	33.29
#1	.0014	.0009	-.0029	.0221	.0000	.0012	.0124	.0001	-.0004
#2	.0013	.0016	-.0699	.0138	.0001	.0007	.0067	-.0003	-.0004
#3	.0009	.0035	-.0304	.0015	.0001	.0002	.0049	.0000	-.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0010**	**.0016**	**-.0005**	**.0000**	**.0004**	**-.0006**	**-.0001**	**-.0004**
Stddev	.0012	.0009	.0002	.0001	.000	.0001	.0006	.0002	.0000
%RSD	400.1	93.64	10.49	27.43	123.8	30.15	101.8	169.1	10.84
#1	.0015	.0005	.0014	-.0004	.0000	.0005	-.0010	.0001	-.0003
#2	.0002	.0021	.0016	-.0005	.0000	.0003	.0001	-.0002	-.0004
#3	-.0009	.0004	.0017	-.0006	.0000	.0003	-.0009	-.0002	-.0004
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/27/2017 10:42:16 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1820.6**	**4009.5**	**31911.**	**6556.1**
Stddev	1.3	4.5	96.	7.8
%RSD	.07005	.11141	.29988	.11843
#1	1822.0	4010.9	32017.	6551.8
#2	1820.4	4004.5	31886.	6565.1
#3	1819.4	4013.1	31831.	6551.4

SGS ACCUTEST FA40657

Zoom In Zoom Out

Sample Name: FA40600-14 Acquired: 1/27/2017 10:46:49 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0001**	**.4829**	**-.0035**	**.0584**	**-.0001**	**8.633**	**.0841**	**.0002**	**.0047**
Stddev	.0003	.0043	.0011	.0000	.0000	.003	.0002	.0001	.0004
%RSD	279.8	.8890	30.35	.0481	60.69	.0352	.2622	26.11	9.369
#1	.0002	.4852	-.0044	.0584	.0000	8.634	.0844	.0003	.0052
#2	-.0005	.4855	-.0023	.0585	-.0001	8.636	.0840	.0002	.0043
#3	-.0001	.4779	-.0039	.0584	-.0001	8.630	.0841	.0003	.0047

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0188**	**.9925**	**.3624**	**1.709**	**.0129**	**.0017**	**3.072**	**.0029**	**.0029**
Stddev	.0003	.0003	.0145	.020	.0001	.0002	.006	.0001	.0014
%RSD	1.466	.0329	4.009	1.178	.5212	9.789	.1950	3.905	47.69
#1	.0186	.9923	.3619	1.723	.0129	.0018	3.074	.0028	.0029
#2	.0187	.9928	.3482	1.718	.0128	.0018	3.076	.0029	.0042
#3	.0191	.9923	.3772	1.686	.0130	.0015	3.065	.0030	.0015

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0027**	**.0087**	**.6816**	**.0291**	**.0630**	**.0080**	**-.0096**	**.0017**	**.0785**
Stddev	.0019	.0018	.0015	.0001	.0003	.0001	.0015	.0002	.0005
%RSD	67.58	20.98	.2172	.2556	.4157	.7505	15.11	14.23	.6608
#1	.0024	.0108	.6804	.0291	.0630	.0079	-.0082	.0014	.0790
#2	.0011	.0077	.6811	.0291	.0632	.0080	-.0095	.0018	.0780
#3	.0048	.0075	.6833	.0292	.0627	.0080	-.0111	.0019	.0786

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1799.3**	**3863.0**	**31391.**	**6478.9**
Stddev	2.6	15.8	66.	19.7
%RSD	.14456	.40919	.21176	.30451
#1	1797.2	3851.0	31421.	6481.4
#2	1802.2	3880.9	31315.	6458.0
#3	1798.6	3857.2	31438.	6497.2

Zoom In Zoom Out

Sample Name: FA40600-15 Acquired: 1/27/2017 10:51:15 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0005**	**.2625**	**-.0025**	**.0275**	**-.0001**	**8.173**	**.0240**	**.0001**	**.0044**
Stddev	.0002	.0092	.0002	.0001	.0000	.010	.0001	.0001	.0004
%RSD	40.25	3.515	6.495	.5054	45.11	.1197	.2511	81.13	8.971
#1	-.0004	.2546	-.0027	.0274	-.0001	8.162	.0240	.0000	.0047
#2	-.0007	.2602	-.0024	.0275	.0000	8.176	.0239	.0001	.0039
#3	-.0004	.2726	-.0026	.0277	-.0001	8.181	.0240	.0001	.0045

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0153**	**.4588**	**.5386**	**1.465**	**.0077**	**-.0001**	**3.082**	**.0023**	**.0018**
Stddev	.0001	.0039	.0225	.015	.0001	.0001	.014	.0001	.0006
%RSD	.6028	.8538	4.178	1.031	1.117	93.25	.4541	3.868	31.87
#1	.0152	.4574	.5363	1.473	.0078	-.0001	3.096	.0023	.0012
#2	.0154	.4557	.5173	1.474	.0076	.0000	3.081	.0022	.0024
#3	.0154	.4632	.5622	1.447	.0077	-.0002	3.068	.0024	.0017

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0007**	**.0071**	**.7124**	**.0243**	**.0444**	**.0130**	**-.0085**	**.0011**	**.0654**
Stddev	.0004	.0025	.0035	.0004	.0001	.0001	.0005	.0003	.0004
%RSD	55.82	35.02	.4889	1.833	.3268	.6614	5.511	23.99	.5563
#1	.0010	.0065	.7164	.0247	.0445	.0129	-.0090	.0012	.0658
#2	.0008	.0098	.7112	.0238	.0443	.0131	-.0083	.0012	.0651
#3	.0002	.0049	.7097	.0244	.0444	.0129	-.0082	.0008	.0654

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1802.2**	**3871.6**	**31401.**	**6547.0**
Stddev	1.4	8.2	145.	11.7
%RSD	.07837	.21223	.46204	.17848
#1	1802.0	3863.8	31340.	6559.9
#2	1803.7	3870.8	31567.	6537.1
#3	1800.9	3880.2	31297.	6544.0

Zoom In Zoom Out

Sample Name: FA40600-16 Acquired: 1/27/2017 10:55:42 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0006**	**.1645**	**-.0032**	**.0264**	**-.0001**	**7.963**	F **5.527**	**.0002**	**.0038**
Stddev	.0002	.0160	.0004	.0002	.0000	.032	.009	.0000	.0002
%RSD	32.79	9.730	13.06	.8796	5.878	.4016	.1684	14.03	4.571
#1	-.0005	.1598	-.0028	.0264	-.0001	7.978	5.532	.0002	.0039
#2	-.0005	.1823	-.0036	.0267	-.0001	7.985	5.516	.0002	.0036
#3	-.0009	.1513	-.0033	.0262	-.0001	7.926	5.532	.0003	.0039

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0137**	**.2669**	**.3043**	**1.514**	**.0054**	**.0003**	**2.944**	**.0026**	**.0014**
Stddev	.0005	.0038	.0101	.028	.0000	.0001	.009	.0001	.0002
%RSD	3.671	1.438	3.328	1.847	.5143	29.95	.3002	2.969	17.41
#1	.0139	.2700	.3101	1.547	.0054	.0004	2.934	.0026	.0016
#2	.0131	.2681	.2926	1.498	.0054	.0002	2.950	.0025	.0012
#3	.0141	.2626	.3101	1.498	.0054	.0003	2.947	.0025	.0013

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0010**	**.0098**	**.5403**	**.0253**	**.0492**	**.0047**	**-.0085**	**.0007**	**.0811**
Stddev	.0007	.0014	.0020	.0001	.0000	.0001	.0007	.0002	.0003
%RSD	73.45	13.85	.3690	.5441	.0987	1.276	8.415	27.24	.3833
#1	.0002	.0108	.5425	.0254	.0492	.0046	-.0082	.0007	.0811
#2	.0011	.0103	.5388	.0252	.0491	.0047	-.0079	.0005	.0809
#3	.0016	.0082	.5395	.0253	.0491	.0047	-.0093	.0009	.0815

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1818.7**	**3925.7**	**31563.**	**6450.5**
Stddev	4.4	12.9	75.	28.1
%RSD	.24372	.32846	.23900	.43621
#1	1813.8	3910.8	31476.	6434.9
#2	1822.3	3934.1	31614.	6433.6
#3	1820.0	3932.1	31598.	6483.0

Zoom In Zoom Out

Sample Name: MP31555-MB1 Acquired: 1/27/2017 11:00:11 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0008**	**.0880**	**-.0033**	**.0337**	**-.0001**	F **2.768**	**-.0001**	**-.0002**
Stddev	.0001	.0065	.0007	.0001	.0000	.002	.0000	.0001
%RSD	11.65	7.359	20.63	.3418	23.44	.0769	65.85	37.06
#1	-.0008	.0955	-.0037	.0337	-.0001	2.770	-.0001	-.0001
#2	-.0007	.0851	-.0037	.0338	-.0001	2.767	.0000	-.0001
#3	-.0009	.0835	-.0025	.0336	-.0001	2.767	-.0001	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit						.5000		
Low Limit						-.5000		

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0016**	**.0020**	F **.2052**	**.1309**	**1.537**	F **.0126**	**-.0014**	F **3.265**
Stddev	.0004	.0002	.0020	.0275	.015	.0001	.0000	.004
%RSD	22.77	12.28	.9694	20.98	.9907	.6238	1.630	.1080
#1	.0019	.0021	.2074	.1023	1.523	.0126	-.0014	3.269
#2	.0018	.0017	.2045	.1333	1.535	.0125	-.0015	3.261
#3	.0012	.0021	.2036	.1571	1.553	.0127	-.0015	3.265
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Fail
High Limit			.1500			.0075		2.500
Low Limit			-.1500			-.0075		-2.500

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0004**	**.0006**	F **.0074**	**1.242**	**.0169**	F **.0160**	**.0019**
Stddev	.0001	.0008	.0009	.0011	.002	.0003	.0001	.0001
%RSD	130.2	215.9	149.2	15.10	.1855	1.935	.8482	2.669
#1	.0000	.0012	-.0003	.0068	1.242	.0165	.0160	.0019
#2	.0001	.0004	.0007	.0087	1.241	.0169	.0161	.0019
#3	.0002	-.0005	.0014	.0067	1.245	.0172	.0158	.0018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	None	Chk Pass	Chk Fail	Chk Pass
High Limit				.0050			.0050	
Low Limit				-.0050			-.0050	

Zoom In Zoom Out

Sample Name: MP31555-MB1 Acquired: 1/27/2017 11:00:11 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	F -.0093	-.0003	F .0242
Stddev	.0007	.0002	.0001
%RSD	7.492	67.00	.2878
#1	-.0093	-.0001	.0243
#2	-.0086	-.0004	.0242
#3	-.0100	-.0005	.0242
Check ?	Chk Fail	Chk Pass	Chk Fail
High Limit	.0050		.0100
Low Limit	-.0050		-.0100

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1794.6	3882.7	31174.	6360.7
Stddev	.1	4.7	131.	17.8
%RSD	.00569	.12014	.41958	.27970
#1	1794.6	3878.3	31172.	6343.2
#2	1794.7	3887.6	31306.	6360.1
#3	1794.5	3882.2	31045.	6378.8

Zoom In Zoom Out

Sample Name: MP31555-B1 Acquired: 1/27/2017 11:04:41 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0481	30.81	2.245	2.227	.0568	F 32.08	.0552	.5439	.2206
Stddev	.0002	.02	.006	.002	.0002	.07	.0000	.0001	.0003
%RSD	.3234	.0728	.2620	.0942	.4057	.2329	.0386	.0272	.1544
#1	.0480	30.79	2.238	2.225	.0570	32.08	.0552	.5441	.2207
#2	.0483	30.82	2.246	2.228	.0566	32.01	.0552	.5438	.2203
#3	.0481	30.83	2.250	2.229	.0569	32.16	.0552	.5439	.2209
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value						25.00			
Range						20.00%			

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2690	30.77	29.25	F 30.51	.5766	.5840	F 32.32	.5637	.5217
Stddev	.0012	.01	.10	.08	.0027	.0008	.12	.0003	.0022
%RSD	.4385	.0435	.3450	.2626	.4617	.1377	.3756	.0483	.4164
#1	.2694	30.76	29.29	30.56	.5796	.5834	32.38	.5640	.5234
#2	.2700	30.76	29.14	30.41	.5756	.5836	32.18	.5634	.5193
#3	.2677	30.78	29.33	30.55	.5745	.5849	32.40	.5637	.5225
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value				25.00			25.00		
Range				20.00%			20.00%		

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5424	2.308	1.031	F .6010	.6012	.5809	2.095	.5289	.5816
Stddev	.0010	.009	.003	.0019	.0011	.0013	.004	.0048	.0018
%RSD	.1867	.3724	.2719	.3226	.1799	.2183	.1898	.9142	.3120
#1	.5432	2.301	1.028	.6013	.6016	.5824	2.091	.5344	.5837
#2	.5413	2.318	1.031	.5989	.5999	.5799	2.095	.5254	.5805
#3	.5428	2.305	1.033	.6027	.6020	.5805	2.099	.5269	.5805
Check ?	Chk Pass	Chk Pass	None	Chk Fail	None	None	Chk Pass	Chk Pass	Chk Pass
Value				.5000					
Range				20.00%					

Zoom In Zoom Out

Sample Name: MP31555-B1 Acquired: 1/27/2017 11:04:41 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1727.8	3771.2	30862.	6245.3
Stddev	6.8	8.8	200.	8.1
%RSD	.39219	.23385	.64714	.12932
#1	1735.5	3781.2	30666.	6252.4
#2	1724.9	3764.7	30855.	6247.0
#3	1722.9	3767.6	31065.	6236.6

Zoom In Zoom Out

Sample Name: MP31555-B2 Acquired: 1/27/2017 11:08:53 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .0479	F 30.13	F 2.229	2.200	F .0555	F 31.92	F .0545	F .5372	F .2164
Stddev	.0009	.11	.009	.016	.0002	.08	.0001	.0015	.0006
%RSD	1.885	.3694	.4025	.7405	.3681	.2413	.1737	.2745	.2650
#1	.0484	30.23	2.235	2.214	.0557	31.92	.0545	.5381	.2163
#2	.0469	30.01	2.218	2.182	.0553	31.85	.0544	.5355	.2170
#3	.0486	30.13	2.232	2.204	.0556	32.00	.0546	.5379	.2159
Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Pass	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail
Value	.2500	40.00	2.000		2.000	40.00	2.000	2.000	2.000
Range	-10.00%	-10.00%	10.00%		-10.00%	-10.00%	-10.00%	-10.00%	-10.00%

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .2649	F 30.03	F 28.94	F 29.77	F .5675	F .5777	F 32.09	F .5572	F .5137
Stddev	.0009	.10	.10	.09	.0008	.0013	.08	.0015	.0018
%RSD	.3475	.3422	.3572	.2961	.1371	.2204	.2610	.2672	.3586
#1	.2651	30.10	29.03	29.67	.5684	.5786	32.18	.5585	.5148
#2	.2640	29.92	28.83	29.81	.5671	.5762	32.02	.5556	.5147
#3	.2658	30.09	28.94	29.83	.5670	.5782	32.07	.5574	.5115
Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail
Value	2.000	40.00	40.00	40.00	2.000	2.000	40.00	2.000	2.000
Range	-10.00%	-10.00%	-10.00%	-10.00%	-10.00%	-10.00%	-10.00%	-10.00%	-10.00%

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .5312	F 2.299	.9417	F .5886	F .5936	F .5649	2.009	F .5196	F .5844
Stddev	.0035	.010	.0040	.0010	.0020	.0016	.003	.0012	.0019
%RSD	.6604	.4226	.4295	.1755	.3359	.2762	.1365	.2351	.3331
#1	.5332	2.301	.9447	.5895	.5959	.5663	2.008	.5209	.5862
#2	.5271	2.289	.9371	.5875	.5928	.5654	2.008	.5193	.5824
#3	.5332	2.308	.9433	.5888	.5921	.5632	2.013	.5185	.5845
Check ?	Chk Fail	Chk Fail	None	Chk Fail	Chk Fail	Chk Fail	Chk Pass	Chk Fail	Chk Fail
Value	2.000	2.000		2.000	2.000	2.000		2.000	2.000
Range	-10.00%	10.00%		-10.00%	-10.00%	-10.00%		-10.00%	-10.00%

Zoom In Zoom Out

Sample Name: MP31555-B2 Acquired: 1/27/2017 11:08:53 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1744.2**	**3788.6**	**31213.**	**6423.9**
Stddev	2.0	9.4	121.	19.9
%RSD	.11698	.24729	.38834	.31025
#1	1745.0	3781.6	31084.	6415.5
#2	1741.8	3799.2	31325.	6446.7
#3	1745.7	3785.0	31229.	6409.6

Zoom In Zoom Out

Sample Name: MP31555-B2 Acquired: 1/27/2017 11:08:53 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0479**	**30.13**	**2.229**	**2.200**	**.0555**	F **31.92**	**.0545**	**.5372**	**.2164**
Stddev	.0009	.11	.009	.016	.0002	.08	.0001	.0015	.0006
%RSD	1.885	.3694	.4025	.7405	.3681	.2413	.1737	.2745	.2650
#1	.0484	30.23	2.235	2.214	.0557	31.92	.0545	.5381	.2163
#2	.0469	30.01	2.218	2.182	.0553	31.85	.0544	.5355	.2170
#3	.0486	30.13	2.232	2.204	.0556	32.00	.0546	.5379	.2159
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value						25.00			
Range						20.00%			

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2649**	**30.03**	**28.94**	**29.77**	**.5675**	**.5777**	F **32.09**	**.5572**	**.5137**
Stddev	.0009	.10	.10	.09	.0008	.0013	.08	.0015	.0018
%RSD	.3475	.3422	.3572	.2961	.1371	.2204	.2610	.2672	.3586
#1	.2651	30.10	29.03	29.67	.5684	.5786	32.18	.5585	.5148
#2	.2640	29.92	28.83	29.81	.5671	.5762	32.02	.5556	.5147
#3	.2658	30.09	28.94	29.83	.5670	.5782	32.07	.5574	.5115
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value							25.00		
Range							20.00%		

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5312**	**2.299**	**.9417**	**.5886**	**.5936**	**.5649**	**2.009**	**.5196**	**.5844**
Stddev	.0035	.010	.0040	.0010	.0020	.0016	.003	.0012	.0019
%RSD	.6604	.4226	.4295	.1755	.3359	.2762	.1365	.2351	.3331
#1	.5332	2.301	.9447	.5895	.5959	.5663	2.008	.5209	.5862
#2	.5271	2.289	.9371	.5875	.5928	.5654	2.008	.5193	.5824
#3	.5332	2.308	.9433	.5888	.5921	.5632	2.013	.5185	.5845
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: MP31555-B2 Acquired: 1/27/2017 11:08:53 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1744.2**	**3788.6**	**31213.**	**6423.9**
Stddev	2.0	9.4	121.	19.9
%RSD	.11698	.24729	.38834	.31025
#1	1745.0	3781.6	31084.	6415.5
#2	1741.8	3799.2	31325.	6446.7
#3	1745.7	3785.0	31229.	6409.6

Zoom In Zoom Out

Sample Name: FA40600-17 Acquired: 1/27/2017 11:13:05 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0000**	**.0535**	**-.0034**	**.0406**	**-.0001**	**7.822**	**.0468**	**.0000**	**.0029**
Stddev	.0002	.0055	.0007	.0001	.0000	.033	.0002	.0001	.0004
%RSD	1532.	10.37	22.09	.3591	29.61	.4265	.3578	340.3	14.24
#1	.0002	.0534	-.0039	.0407	-.0001	7.860	.0469	-.0001	.0034
#2	-.0001	.0592	-.0037	.0405	-.0001	7.810	.0469	.0000	.0027
#3	-.0001	.0481	-.0025	.0405	-.0001	7.797	.0466	.0002	.0026

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0129**	**.1594**	**.2667**	**1.676**	**.0035**	**-.0014**	**2.883**	**.0017**	**.0013**
Stddev	.0002	.0010	.0269	.039	.0000	.0001	.024	.0001	.0009
%RSD	1.733	.6316	10.10	2.294	.8084	8.809	.8219	4.341	70.23
#1	.0127	.1598	.2908	1.696	.0035	-.0015	2.909	.0018	.0004
#2	.0130	.1601	.2718	1.632	.0035	-.0014	2.877	.0016	.0022
#3	.0131	.1583	.2376	1.701	.0036	-.0012	2.863	.0018	.0012

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0001**	**.0082**	**.5532**	**.0218**	**.0619**	**.0021**	**-.0088**	**.0014**	**.0259**
Stddev	.0010	.0011	.0018	.0002	.0003	.0001	.0003	.0002	.0000
%RSD	1419.	13.19	.3245	.8625	.4389	3.208	3.312	16.61	.0353
#1	.0000	.0080	.5532	.0217	.0622	.0022	-.0091	.0012	.0259
#2	-.0011	.0072	.5550	.0220	.0619	.0021	-.0086	.0013	.0259
#3	.0009	.0094	.5515	.0216	.0617	.0021	-.0085	.0016	.0259

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1815.2**	**3911.9**	**31447.**	**6493.2**
Stddev	2.7	10.2	77.	20.3
%RSD	.14726	.26174	.24362	.31189
#1	1812.5	3904.2	31413.	6490.4
#2	1817.8	3907.9	31535.	6514.7
#3	1815.2	3923.5	31393.	6474.5

Zoom In Zoom Out

Sample Name: FA40600-18 Acquired: 1/27/2017 11:17:33 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0003**	**.1851**	**-.0027**	**.0363**	**-.0001**	**9.395**	**.1188**	**.0001**	**.0053**
Stddev	.0006	.0092	.0007	.0003	.0000	.019	.0003	.0000	.0002
%RSD	229.4	4.947	27.63	.7236	43.79	.2032	.2583	11.37	4.483
#1	-.0009	.1804	-.0027	.0360	-.0001	9.378	.1186	.0001	.0053
#2	-.0003	.1956	-.0034	.0365	-.0001	9.416	.1186	.0001	.0051
#3	.0004	.1793	-.0019	.0363	-.0001	9.390	.1191	.0001	.0056

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0158**	**.3022**	**.3939**	**1.986**	**.0062**	**.0012**	**3.916**	**.0034**	**.0014**
Stddev	.0004	.0038	.0101	.038	.0000	.0001	.018	.0002	.0009
%RSD	2.600	1.256	2.565	1.895	.5856	5.666	.4615	5.342	66.43
#1	.0158	.2995	.3826	1.967	.0062	.0011	3.895	.0033	.0003
#2	.0163	.3006	.3970	1.962	.0062	.0012	3.924	.0036	.0020
#3	.0154	.3066	.4021	2.030	.0061	.0012	3.928	.0034	.0018

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0013**	**.0095**	**.6230**	**.0244**	**.0590**	**.0049**	**-.0097**	**.0013**	**.0623**
Stddev	.0013	.0013	.0011	.0003	.0003	.0001	.0011	.0003	.0001
%RSD	100.3	14.09	.1718	1.229	.4963	2.918	11.34	20.38	.2172
#1	.0022	.0109	.6219	.0247	.0587	.0048	-.0108	.0012	.0623
#2	-.0002	.0095	.6233	.0242	.0591	.0049	-.0086	.0012	.0622
#3	.0018	.0082	.6240	.0242	.0592	.0051	-.0098	.0016	.0625

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1757.2**	**3811.9**	**30620.**	**6258.4**
Stddev	1.5	5.6	167.	4.1
%RSD	.08447	.14616	.54693	.06515
#1	1756.4	3817.3	30668.	6257.4
#2	1756.3	3806.2	30434.	6255.0
#3	1758.9	3812.3	30759.	6262.9

Zoom In Zoom Out

Sample Name: FA40600-19 Acquired: 1/27/2017 11:22:01 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0007**	**.0693**	**-.0033**	**.0292**	**-.0001**	**8.230**	**.0126**	**.0002**	**.0085**
Stddev	.0001	.0051	.0002	.0000	.0000	.026	.0000	.0001	.0002
%RSD	15.41	7.287	6.731	.1310	31.21	.3135	.2343	29.48	2.689
#1	-.0008	.0659	-.0035	.0292	-.0001	8.205	.0126	.0002	.0084
#2	-.0007	.0751	-.0031	.0291	-.0001	8.230	.0126	.0002	.0084
#3	-.0006	.0669	-.0034	.0292	-.0001	8.256	.0126	.0003	.0088

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0145**	**.1976**	**.3299**	**1.581**	**.0048**	**.0001**	**2.429**	**.0058**	**.0007**
Stddev	.0004	.0032	.0135	.016	.0000	.0000	.015	.0000	.0001
%RSD	2.737	1.615	4.095	1.032	.3504	10.38	.5982	.2754	17.86
#1	.0147	.1939	.3259	1.598	.0048	.0001	2.416	.0058	.0006
#2	.0147	.1999	.3450	1.565	.0048	.0001	2.425	.0058	.0006
#3	.0140	.1990	.3190	1.580	.0048	.0001	2.445	.0058	.0009

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0006**	**.0071**	**.5975**	**.0214**	**.0560**	**.0028**	**-.0097**	**.0005**	**.0337**
Stddev	.0004	.0015	.0006	.0004	.0001	.0001	.0011	.0001	.0002
%RSD	61.62	21.72	.0980	1.679	.2473	2.953	11.61	12.90	.5128
#1	.0010	.0056	.5968	.0217	.0558	.0027	-.0093	.0004	.0339
#2	.0003	.0087	.5979	.0214	.0559	.0028	-.0087	.0005	.0338
#3	.0006	.0072	.5977	.0210	.0561	.0028	-.0109	.0004	.0335

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1774.2**	**3838.8**	**30944.**	**6300.5**
Stddev	3.2	3.8	164.	9.7
%RSD	.17790	.09845	.53006	.15405
#1	1772.2	3836.0	30876.	6309.6
#2	1772.5	3837.2	30824.	6290.3
#3	1777.8	3843.1	31131.	6301.7

Zoom In Zoom Out

Sample Name: FA40600-20 Acquired: 1/27/2017 11:26:29 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0001**	**.1596**	**-.0025**	**.0437**	**-.0001**	**7.298**	**.0381**	**.0004**	**.0366**
Stddev	.0004	.0011	.0005	.0001	.0000	.014	.0000	.0001	.0002
%RSD	248.0	.6903	18.45	.2564	37.18	.1937	.0327	12.23	.6097
#1	-.0006	.1606	-.0030	.0438	-.0001	7.303	.0381	.0004	.0369
#2	.0001	.1597	-.0023	.0438	-.0001	7.308	.0381	.0004	.0367
#3	.0000	.1584	-.0022	.0436	-.0001	7.282	.0381	.0005	.0364

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0110**	**.5052**	**.3292**	**1.550**	**.0104**	**.1161**	**2.800**	**.0250**	**.0011**
Stddev	.0001	.0042	.0106	.038	.0001	.0001	.006	.0002	.0006
%RSD	1.265	.8221	3.207	2.441	.7308	.0564	.2051	.6869	52.86
#1	.0109	.5014	.3295	1.526	.0103	.1161	2.804	.0252	.0014
#2	.0112	.5046	.3396	1.593	.0105	.1161	2.802	.0249	.0004
#3	.0110	.5096	.3185	1.530	.0105	.1162	2.793	.0250	.0015

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0010**	**.0070**	**.5639**	**.0202**	**.0606**	**.0075**	**-.0067**	**.0024**	**.0658**
Stddev	.0011	.0004	.0017	.0001	.0001	.0001	.0013	.0002	.0002
%RSD	109.3	6.359	.3015	.4461	.1822	1.036	18.71	9.680	.2588
#1	.0011	.0074	.5659	.0203	.0606	.0076	-.0053	.0027	.0659
#2	.0021	.0070	.5628	.0202	.0608	.0076	-.0074	.0022	.0656
#3	-.0001	.0065	.5631	.0201	.0605	.0074	-.0075	.0024	.0657

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1809.6**	**3915.5**	**31637.**	**6495.0**
Stddev	6.6	11.2	71.	50.2
%RSD	.36452	.28703	.22408	.77316
#1	1804.1	3903.8	31661.	6516.1
#2	1807.7	3916.4	31557.	6437.6
#3	1816.9	3926.2	31692.	6531.2

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/27/2017 11:30:52 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2541**	**37.92**	**1.985**	**1.938**	**1.958**	**39.23**	**2.001**	**1.973**	**1.979**
Stddev	.0004	.04	.004	.001	.003	.10	.001	.001	.004
%RSD	.1516	.1177	.2236	.0635	.1470	.2525	.0402	.0642	.2235
#1	.2540	37.96	1.981	1.936	1.960	39.32	2.001	1.973	1.977
#2	.2545	37.87	1.990	1.938	1.955	39.12	2.000	1.973	1.984
#3	.2538	37.91	1.985	1.939	1.959	39.24	2.002	1.975	1.975
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.890**	**38.71**	**38.55**	**38.89**	**2.031**	**2.042**	**38.61**	**1.999**	**1.962**
Stddev	.003	.08	.06	.10	.004	.004	.01	.003	.007
%RSD	.1494	.2050	.1633	.2589	.2063	.1800	.0323	.1251	.3797
#1	1.890	38.75	38.56	39.00	2.030	2.040	38.62	1.999	1.969
#2	1.886	38.61	38.48	38.79	2.036	2.040	38.59	1.996	1.954
#3	1.892	38.75	38.60	38.89	2.028	2.047	38.61	2.001	1.962
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.981**	**1.981**	**2.528**	**2.054**	**2.031**	**2.045**	**1.974**	**2.069**	**2.033**
Stddev	.004	.002	.005	.004	.004	.001	.008	.002	.002
%RSD	.1811	.1113	.2112	.2117	.2153	.0465	.4074	.0898	.1015
#1	1.978	1.981	2.522	2.059	2.034	2.046	1.976	2.067	2.035
#2	1.979	1.979	2.529	2.054	2.026	2.046	1.965	2.071	2.033
#3	1.985	1.983	2.532	2.050	2.034	2.044	1.980	2.069	2.031
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/27/2017 11:30:52 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1734.3**	**3903.2**	**31720.**	**6480.8**
Stddev	.9	7.8	76.	27.2
%RSD	.05130	.19885	.24048	.42019
#1	1734.3	3909.5	31808.	6457.9
#2	1735.1	3905.5	31683.	6510.9
#3	1733.4	3894.5	31670.	6473.6

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/27/2017 11:35:02 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0004**	**-.0005**	**-.0003**	**.0000**	**.0000**	**.0001**	**-.0001**	**-.0001**	**.0000**
Stddev	.0002	.0028	.0001	.0002	.0000	.0015	.0000	.0000	.000
%RSD	37.20	537.3	39.79	1288.	75.26	2974.	62.37	35.22	448.9
#1	-.0005	.0027	-.0005	.0001	.0000	.0014	.0000	-.0001	.0002
#2	-.0006	-.0025	-.0002	.0002	.0000	-.0016	-.0001	-.0001	-.0002
#3	-.0002	-.0017	-.0003	-.0002	.0000	.0003	-.0001	-.0002	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0007**	**.0033**	**-.0228**	**.0164**	**.0000**	**.0002**	**.0035**	**-.0001**	**-.0006**
Stddev	.0004	.0025	.0243	.0057	.000	.0005	.0053	.0000	.0009
%RSD	54.90	76.76	106.8	35.08	680.3	225.7	148.6	26.19	141.6
#1	.0011	.0062	-.0311	.0133	.0000	.0007	.0033	-.0001	-.0003
#2	.0004	.0026	.0046	.0128	-.0001	.0003	.0089	-.0001	.0000
#3	.0006	.0012	-.0418	.0230	.0000	-.0003	-.0016	-.0001	-.0016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0003**	**.0009**	**.0016**	**-.0005**	**.0000**	**.0002**	**-.0013**	**.0001**	**-.0004**
Stddev	.0010	.0005	.0006	.0006	.0000	.0001	.0016	.0001	.0000
%RSD	378.3	54.59	36.45	105.2	9.460	51.08	119.8	90.72	12.33
#1	.0008	.0007	.0022	-.0011	.0000	.0002	-.0029	.0000	-.0004
#2	-.0013	.0005	.0010	.0000	.0000	.0003	-.0015	.0001	-.0004
#3	-.0003	.0014	.0018	-.0004	.0000	.0001	.0003	.0001	-.0004
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/27/2017 11:35:02 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1837.2**	**4067.6**	**32150.**	**6602.6**
Stddev	5.5	5.4	154.	8.7
%RSD	.29850	.13163	.48021	.13118
#1	1834.2	4067.6	32107.	6594.3
#2	1833.9	4062.2	32321.	6611.6
#3	1843.6	4072.9	32021.	6601.8

Zoom In Zoom Out

Sample Name: FA40600-21 Acquired: 1/27/2017 11:39:35 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0009**	**6.666**	**-.0031**	**.0585**	**-.0001**	**10.41**	F **12.17**	**.0003**	**.0311**
Stddev	.0002	.032	.0001	.0004	.0000	.01	.03	.0001	.0002
%RSD	18.27	.4790	3.071	.6132	38.60	.1074	.2269	38.54	.6550
#1	.0008	6.684	-.0030	.0590	.0000	10.39	12.19	.0004	.0312
#2	.0011	6.685	-.0032	.0583	.0000	10.42	12.18	.0002	.0313
#3	.0008	6.629	-.0030	.0583	-.0001	10.41	12.14	.0002	.0309

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0493**	**1.142**	**2.399**	**1.494**	**.0187**	**.5418**	**5.434**	**.0163**	**.0031**
Stddev	.0004	.007	.021	.036	.0001	.0009	.016	.0001	.0003
%RSD	.7292	.5753	.8791	2.421	.5278	.1630	.2992	.7702	8.355
#1	.0490	1.139	2.378	1.499	.0188	.5409	5.426	.0163	.0028
#2	.0493	1.138	2.399	1.527	.0188	.5427	5.423	.0165	.0032
#3	.0497	1.150	2.420	1.456	.0186	.5419	5.452	.0162	.0033

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0028**	**.0107**	**1.028**	**.0258**	**.0637**	**.0326**	**-.0087**	**.0082**	**.1446**
Stddev	.0007	.0010	.002	.0001	.0001	.0001	.0019	.0002	.0006
%RSD	26.27	8.980	.1736	.5394	.1941	.3834	22.31	1.863	.4365
#1	.0026	.0107	1.028	.0259	.0637	.0327	-.0109	.0080	.1451
#2	.0036	.0097	1.030	.0257	.0637	.0325	-.0076	.0082	.1448
#3	.0022	.0116	1.027	.0257	.0635	.0328	-.0075	.0083	.1439

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1793.3**	**3920.4**	**31267.**	**6361.5**
Stddev	4.9	2.0	87.	12.1
%RSD	.27246	.05031	.27672	.19003
#1	1787.8	3921.1	31366.	6353.2
#2	1794.9	3918.2	31208.	6356.0
#3	1797.2	3921.9	31227.	6375.4

Zoom In Zoom Out

Sample Name: FA40600-22 Acquired: 1/27/2017 11:43:59 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0004**	**3.823**	**-.0035**	**.0578**	**-.0001**	**8.608**	**.4004**	**.0002**	**.0147**
Stddev	.0003	.007	.0013	.0002	.0001	.043	.0009	.0001	.0002
%RSD	85.38	.1858	37.26	.3952	102.7	.5052	.2215	31.17	1.248
#1	.0003	3.824	-.0050	.0578	.0000	8.580	.4008	.0003	.0149
#2	.0001	3.829	-.0029	.0581	.0000	8.658	.4010	.0002	.0145
#3	.0007	3.815	-.0026	.0576	-.0002	8.587	.3994	.0002	.0148

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0334**	**.7870**	**1.040**	**1.705**	**.0143**	**.5289**	**3.827**	**.0079**	**.0037**
Stddev	.0005	.0055	.020	.022	.0000	.0011	.014	.0001	.0004
%RSD	1.507	.6957	1.918	1.321	.1557	.2035	.3765	1.107	10.75
#1	.0339	.7870	1.020	1.696	.0143	.5289	3.838	.0080	.0039
#2	.0333	.7925	1.060	1.689	.0143	.5300	3.833	.0078	.0040
#3	.0329	.7815	1.041	1.731	.0143	.5279	3.811	.0079	.0033

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0066**	**.0095**	**.8803**	**.0364**	**.0649**	**.0220**	**-.0090**	**.0057**	**.0830**
Stddev	.0003	.0008	.0060	.0007	.0003	.0000	.0013	.0001	.0002
%RSD	4.925	8.006	.6771	1.940	.5125	.2240	14.81	2.251	.2867
#1	.0066	.0098	.8821	.0371	.0652	.0220	-.0084	.0059	.0828
#2	.0070	.0101	.8852	.0364	.0648	.0220	-.0106	.0057	.0833
#3	.0063	.0086	.8737	.0356	.0646	.0221	-.0081	.0056	.0829

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1740.0**	**3800.3**	**30429.**	**6189.0**
Stddev	9.4	17.2	49.	20.8
%RSD	.54172	.45169	.16179	.33597
#1	1729.3	3783.2	30399.	6206.6
#2	1743.8	3800.1	30402.	6166.1
#3	1747.0	3817.5	30486.	6194.5

Zoom In Zoom Out

Sample Name: FA40600-23 Acquired: 1/27/2017 11:48:25 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0001**	**.5846**	**-.0032**	**.0489**	**-.0001**	**7.892**	**.1428**	**.0002**	**.0176**
Stddev	.0003	.0130	.0003	.0003	.0000	.045	.0003	.0000	.0002
%RSD	335.0	2.221	9.292	.6811	15.18	.5679	.1766	25.53	.9465
#1	-.0004	.5753	-.0028	.0490	-.0001	7.937	.1431	.0001	.0178
#2	.0000	.5792	-.0034	.0486	-.0001	7.891	.1428	.0002	.0174
#3	.0002	.5995	-.0033	.0492	-.0001	7.848	.1426	.0002	.0177

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0257**	**.8849**	**.8832**	**1.435**	**.0169**	**.0621**	**3.627**	**.0121**	**.0019**
Stddev	.0002	.0036	.0215	.018	.0002	.0004	.014	.0001	.0005
%RSD	.5957	.4066	2.430	1.291	1.120	.5759	.3842	.8117	26.98
#1	.0258	.8885	.8631	1.446	.0168	.0618	3.636	.0122	.0017
#2	.0256	.8813	.8807	1.413	.0167	.0625	3.611	.0121	.0016
#3	.0258	.8848	.9058	1.444	.0171	.0621	3.634	.0120	.0025

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0030**	**.0072**	**.7627**	**.0274**	**.0579**	**.0178**	**-.0088**	**.0032**	**.0902**
Stddev	.0013	.0003	.0021	.0004	.0006	.0002	.0010	.0002	.0003
%RSD	41.83	4.530	.2810	1.349	1.048	.8665	11.10	7.485	.2956
#1	.0037	.0075	.7602	.0270	.0580	.0176	-.0080	.0034	.0905
#2	.0016	.0070	.7636	.0274	.0573	.0179	-.0086	.0032	.0901
#3	.0038	.0069	.7642	.0278	.0585	.0179	-.0099	.0030	.0901

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1800.6**	**3894.3**	**31610.**	**6472.1**
Stddev	4.2	3.0	163.	24.1
%RSD	.23329	.07717	.51694	.37284
#1	1797.8	3897.4	31704.	6444.7
#2	1798.5	3891.5	31705.	6481.1
#3	1805.4	3893.9	31421.	6490.3

Zoom In Zoom Out

Sample Name: FA40600-24 Acquired: 1/27/2017 11:52:51 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0001**	**9.320**	**-.0035**	**.0405**	**-.0001**	**8.712**	**.0527**	**.0004**	**.0074**
Stddev	.0002	.040	.0013	.0002	.0000	.027	.0001	.0001	.0000
%RSD	196.1	.4315	38.53	.3884	55.41	.3118	.1743	20.84	.4321
#1	.0001	9.327	-.0047	.0407	-.0001	8.681	.0528	.0004	.0074
#2	-.0001	9.357	-.0020	.0405	.0000	8.726	.0526	.0004	.0073
#3	.0002	9.277	-.0037	.0404	-.0001	8.729	.0528	.0003	.0074

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0964**	**1.444**	**.5524**	**1.727**	**.0298**	**.0014**	**3.315**	**.0045**	**.0062**
Stddev	.0005	.005	.0197	.026	.0001	.0003	.008	.0002	.0006
%RSD	.5413	.3153	3.571	1.488	.4010	19.87	.2531	3.453	9.048
#1	.0964	1.439	.5307	1.705	.0297	.0011	3.307	.0046	.0065
#2	.0969	1.448	.5693	1.720	.0299	.0015	3.324	.0044	.0065
#3	.0959	1.444	.5573	1.755	.0299	.0016	3.313	.0044	.0055

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0032**	**.0082**	**1.151**	**.0246**	**.0566**	**.0451**	**-.0087**	**.0038**	**.0891**
Stddev	.0011	.0015	.004	.0001	.0004	.0000	.0007	.0002	.0002
%RSD	34.71	18.24	.3316	.4517	.6464	.0524	8.196	4.666	.1954
#1	.0037	.0067	1.155	.0247	.0568	.0451	-.0086	.0039	.0889
#2	.0040	.0098	1.148	.0247	.0567	.0452	-.0081	.0036	.0890
#3	.0019	.0082	1.149	.0245	.0561	.0451	-.0095	.0040	.0893

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1794.9**	**3881.1**	**31398.**	**6426.2**
Stddev	7.2	10.8	55.	20.8
%RSD	.40145	.27777	.17493	.32313
#1	1792.6	3870.8	31461.	6448.0
#2	1789.2	3880.3	31371.	6406.7
#3	1803.0	3892.3	31362.	6423.8

Zoom In Zoom Out

Sample Name: FA40600-25 Acquired: 1/27/2017 11:57:17 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	**-.0005**	**.1384**	**-.0029**	**.0299**	**-.0001**	**8.545**	**.0202**	**.0001**
Stddev	.0002	.0033	.0012	.0002	.0000	.036	.0001	.0001
%RSD	34.34	2.407	41.07	.6846	68.37	.4233	.3075	175.9
#1	-.0007	.1421	-.0043	.0301	.0000	8.581	.0203	.0002
#2	-.0004	.1357	-.0019	.0298	.0000	8.508	.0202	-.0001
#3	-.0004	.1375	-.0027	.0298	-.0001	8.547	.0202	.0001

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	**.0065**	**.0212**	**.3041**	**.3821**	**1.500**	**.0057**	**-.0002**	**2.869**
Stddev	.0002	.0004	.0014	.0039	.029	.0000	.0001	.006
%RSD	3.038	1.998	.4641	1.020	1.942	.8666	29.92	.2078
#1	.0066	.0215	.3057	.3832	1.466	.0058	-.0002	2.872
#2	.0063	.0213	.3031	.3778	1.517	.0057	-.0003	2.862
#3	.0067	.0207	.3034	.3854	1.517	.0057	-.0002	2.873

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	**.0033**	**.0011**	**.0023**	**.0083**	**.6558**	**.0235**	**.0574**	**.0044**
Stddev	.0001	.0002	.0003	.0015	.0008	.0004	.0001	.0001
%RSD	2.761	15.86	13.42	18.31	.1178	1.814	.2597	2.503
#1	.0034	.0011	.0023	.0097	.6567	.0238	.0576	.0044
#2	.0033	.0009	.0019	.0085	.6555	.0235	.0574	.0043
#3	.0032	.0013	.0026	.0067	.6553	.0230	.0573	.0045

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	F **-.0103**	**.0007**	**.0378**
Stddev	.0010	.0001	.0002
%RSD	9.539	21.94	.5079
#1	-.0111	.0005	.0380
#2	-.0106	.0008	.0376
#3	-.0092	.0007	.0378

Zoom In Zoom Out

Sample Name: FA40600-25 Acquired: 1/27/2017 11:57:17 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1778.1**	**3877.8**	**30774.**	**6234.8**
Stddev	3.4	15.7	108.	22.4
%RSD	.19337	.40426	.35143	.35860
#1	1777.9	3863.3	30705.	6209.2
#2	1774.7	3875.6	30899.	6244.6
#3	1781.6	3894.4	30719.	6250.5

Zoom In Zoom Out

Sample Name: FA40614-7 Acquired: 1/27/2017 12:01:45 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 4.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0017**	**-.0002**	**-.0012**	**.0160**	**-.0004**	**47.97**	**-.0006**	**-.0006**	**.0000**
Stddev	.0006	.0391	.0037	.0005	.0001	.12	.0001	.0001	.0005
%RSD	35.93	20100.	301.4	2.851	33.77	.2594	15.69	15.75	3365.
#1	-.0010	-.0454	-.0035	.0165	-.0004	47.83	-.0005	-.0005	.0003
#2	-.0020	.0221	.0031	.0156	-.0004	48.06	-.0006	-.0006	.0003
#3	-.0020	.0227	-.0033	.0158	-.0002	48.02	-.0007	-.0007	-.0006

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0016**	**.4420**	**1.227**	**5.570**	**.0076**	**-.0077**	**198.2**	**-.0006**	**-.0024**
Stddev	.0008	.0020	.058	.056	.0001	.0006	.3	.0005	.0038
%RSD	51.08	.4549	4.721	1.003	1.763	7.798	.1428	82.59	155.7
#1	.0012	.4398	1.175	5.586	.0077	-.0071	198.0	-.0004	.0018
#2	.0025	.4425	1.289	5.617	.0075	-.0076	198.1	-.0012	-.0037
#3	.0010	.4438	1.217	5.508	.0078	-.0083	198.6	-.0003	-.0054

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0008**	**.0037**	**5.066**	**-.0015**	**1.483**	**.0011**	**-.0058**	**.0000**	**.0375**
Stddev	.0035	.0037	.019	.0012	.003	.0007	.0010	.000	.0005
%RSD	454.6	98.88	.3703	79.19	.1673	64.32	17.18	1166.	1.234
#1	.0033	.0038	5.045	-.0017	1.481	.0003	-.0066	.0001	.0375
#2	-.0025	.0073	5.072	-.0003	1.483	.0014	-.0047	-.0001	.0379
#3	-.0031	.0000	5.082	-.0026	1.486	.0016	-.0062	.0000	.0370

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1804.6**	**3969.0**	**31864.**	**6370.4**
Stddev	3.9	15.6	54.	7.9
%RSD	.21708	.39237	.16874	.12449
#1	1806.0	3983.7	31905.	6375.8
#2	1807.7	3970.7	31885.	6374.0
#3	1800.2	3952.7	31803.	6361.3

Zoom In Zoom Out

Sample Name: FA40614-11 Acquired: 1/27/2017 12:06:17 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 4.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0012**	**.0141**	**-.0036**	**.0127**	**-.0004**	**73.46**	**-.0008**	**-.0007**	**-.0004**
Stddev	.0009	.0269	.0041	.0007	.0002	.22	.0001	.0001	.0013
%RSD	73.80	190.7	115.1	5.498	65.73	.3019	15.82	17.93	301.0
#1	-.0022	-.0106	-.0009	.0132	-.0005	73.64	-.0007	-.0007	.0009
#2	-.0005	.0428	-.0015	.0119	-.0001	73.21	-.0010	-.0006	-.0016
#3	-.0009	.0102	-.0083	.0130	-.0005	73.52	-.0008	-.0009	-.0006

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0042**	**.7748**	**1.775**	**7.477**	**.0210**	**-.0088**	**173.8**	**-.0007**	**-.0026**
Stddev	.0009	.0029	.044	.101	.0000	.0004	.5	.0002	.0025
%RSD	21.92	.3705	2.470	1.345	.2109	4.784	.2961	26.57	97.54
#1	.0044	.7776	1.761	7.593	.0210	-.0090	174.2	-.0008	-.0004
#2	.0049	.7719	1.739	7.427	.0210	-.0090	174.0	-.0005	-.0021
#3	.0032	.7748	1.824	7.412	.0209	-.0083	173.3	-.0009	-.0053

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0002**	**.0044**	**6.374**	**-.0016**	**1.435**	**.0015**	**-.0082**	**-.0005**	**.0325**
Stddev	.0030	.0061	.031	.0015	.003	.0002	.0073	.0009	.0002
%RSD	1686.	137.8	.4912	97.25	.2036	13.73	88.56	175.4	.6900
#1	.0004	.0052	6.340	-.0007	1.438	.0012	-.0150	.0005	.0324
#2	-.0029	-.0020	6.403	-.0007	1.436	.0015	-.0091	-.0007	.0328
#3	.0030	.0100	6.379	-.0033	1.432	.0016	-.0005	-.0013	.0324

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1788.5**	**3909.6**	**31678.**	**6435.1**
Stddev	9.1	13.4	163.	35.2
%RSD	.50815	.34274	.51531	.54752
#1	1795.7	3917.1	31494.	6394.7
#2	1778.3	3894.1	31735.	6459.6
#3	1791.5	3917.5	31806.	6451.1

Zoom In Zoom Out

Sample Name: FA40531-7 Acquired: 1/27/2017 12:10:47 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 20.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0068**	**.0298**	**.0047**	**.0099**	**-.0029**	**85.45**	**-.0013**	**-.0013**	**-.0050**
Stddev	.0030	.1321	.0112	.0015	.0004	.27	.0006	.0012	.0062
%RSD	44.39	442.6	238.5	15.25	13.52	.3218	47.48	96.39	123.9
#1	-.0099	-.0924	-.0079	.0113	-.0031	85.67	-.0011	.0001	.0022
#2	-.0039	.0120	.0135	.0083	-.0024	85.54	-.0008	-.0017	-.0082
#3	-.0067	.1699	.0086	.0102	-.0031	85.14	-.0020	-.0023	-.0090

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**-.0006**	**5.599**	**3.269**	**3.957**	**.0479**	**-.0369**	**1378.**	**-.0029**	**-.0022**
Stddev	.0054	.041	.250	.606	.0002	.0021	2.	.0026	.0181
%RSD	928.7	.7325	7.646	15.31	.4032	5.747	.1537	89.46	830.6
#1	.0008	5.620	3.022	3.961	.0480	-.0384	1379.	-.0040	.0149
#2	-.0065	5.552	3.522	4.560	.0480	-.0345	1376.	.0001	-.0212
#3	.0040	5.626	3.263	3.349	.0477	-.0378	1380.	-.0048	-.0003

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0199**	**.0057**	**3.395**	**-.0117**	**.5776**	**-.0027**	**.0025**	**-.0058**	F **84.39**
Stddev	.0193	.0271	.012	.0023	.0026	.0013	.0283	.0005	.15
%RSD	97.12	476.8	.3655	20.11	.4482	48.76	1119.	8.500	.1761
#1	-.0081	.0155	3.385	-.0113	.5779	-.0039	-.0145	-.0052	84.23
#2	-.0422	.0266	3.391	-.0142	.5749	-.0013	.0352	-.0062	84.52
#3	-.0094	-.0250	3.409	-.0095	.5800	-.0027	-.0130	-.0059	84.43

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1822.6**	**4022.5**	**32275.**	**6451.9**
Stddev	3.8	3.6	159.	12.6
%RSD	.20604	.08858	.49378	.19452
#1	1821.0	4026.5	32321.	6452.9
#2	1819.8	4021.3	32406.	6464.0
#3	1826.8	4019.6	32097.	6438.9

Zoom In Zoom Out

Sample Name: FA40656-1 Acquired: 1/27/2017 12:15:16 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 4.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0006**	**.0304**	**-.0044**	**.0610**	**-.0004**	**168.3**	**-.0007**	**-.0008**	**-.0004**
Stddev	.0007	.0165	.0010	.0006	.0001	.5	.0002	.0001	.0008
%RSD	118.4	54.22	22.88	.9627	35.52	.2922	31.02	10.68	181.7
#1	-.0006	.0208	-.0045	.0614	-.0005	168.8	-.0004	-.0007	-.0012
#2	.0001	.0494	-.0053	.0603	-.0005	168.2	-.0007	-.0007	-.0005
#3	-.0013	.0210	-.0033	.0613	-.0002	167.8	-.0008	-.0009	.0004

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0043**	**1.383**	**2.348**	**25.47**	**.0163**	**-.0092**	**198.1**	**-.0005**	**.0001**
Stddev	.0007	.020	.077	.03	.0001	.0005	.6	.0006	.0023
%RSD	16.23	1.458	3.287	.1145	.6173	4.921	.2869	107.1	1841.
#1	.0042	1.404	2.302	25.43	.0163	-.0089	198.7	-.0011	.0027
#2	.0051	1.363	2.437	25.49	.0164	-.0097	198.0	.0001	-.0016
#3	.0037	1.381	2.306	25.48	.0163	-.0089	197.5	-.0006	-.0007

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0001**	**-.0061**	**8.952**	**.0005**	**1.142**	**.0024**	**-.0073**	**-.0001**	**.0359**
Stddev	.0020	.0052	.027	.0002	.001	.0004	.0040	.0012	.0005
%RSD	1378.	85.34	.2986	34.25	.0573	17.52	55.59	1586.	1.423
#1	.0014	-.0032	8.931	.0003	1.142	.0026	-.0041	-.0010	.0363
#2	.0006	-.0121	8.943	.0005	1.142	.0019	-.0059	.0013	.0360
#3	-.0024	-.0030	8.982	.0007	1.141	.0027	-.0118	-.0006	.0353

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1802.1**	**3963.7**	**31838.**	**6451.1**
Stddev	4.9	6.8	64.	22.4
%RSD	.27149	.17040	.20209	.34714
#1	1798.1	3961.4	31904.	6426.2
#2	1807.6	3971.3	31836.	6469.6
#3	1800.6	3958.4	31776.	6457.5

Zoom In Zoom Out

Sample Name: FA40657-1 Acquired: 1/27/2017 12:19:46 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0071**	**202.9**	**.1660**	**2.578**	**.0479**	**431.4**	**.0045**	**.1259**	**.2238**
Stddev	.0024	.5	.0041	.007	.0003	1.2	.0006	.0013	.0027
%RSD	34.05	.2684	2.467	.2834	.5810	.2836	13.66	1.002	1.187
#1	-.0049	203.3	.1640	2.576	.0477	431.6	.0050	.1274	.2258
#2	-.0097	203.1	.1708	2.572	.0482	432.5	.0038	.1253	.2208
#3	-.0067	202.3	.1634	2.586	.0478	430.1	.0048	.1251	.2247

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.4012**	**432.9**	**64.58**	**129.3**	**10.09**	**.2752**	**2.140**	**.2456**	**.9684**
Stddev	.0016	1.4	.31	.7	.03	.0013	.024	.0009	.0117
%RSD	.4048	.3288	.4798	.5702	.2845	.4561	1.101	.3503	1.209
#1	.4030	432.6	64.94	129.4	10.11	.2759	2.114	.2466	.9816
#2	.4003	434.4	64.37	129.9	10.10	.2738	2.161	.2451	.9593
#3	.4002	431.6	64.44	128.4	10.06	.2760	2.144	.2452	.9645

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0099**	**-.0512**	**3.776**	**.0543**	**.8524**	**6.768**	**-.0257**	**.4651**	**3.312**
Stddev	.0100	.0197	.030	.0014	.0006	.018	.0114	.0012	.009
%RSD	101.0	38.47	.7879	2.627	.0693	.2739	44.25	.2558	.2875
#1	.0190	-.0524	3.809	.0535	.8530	6.789	-.0388	.4663	3.322
#2	.0114	-.0702	3.768	.0560	.8522	6.759	-.0190	.4640	3.303
#3	-.0008	-.0309	3.751	.0535	.8518	6.755	-.0192	.4650	3.310

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1810.5**	**4726.4**	**37318.**	**7515.0**
Stddev	.7	8.8	109.	24.8
%RSD	.04013	.18698	.29080	.33032
#1	1810.4	4722.4	37195.	7508.9
#2	1809.8	4720.2	37359.	7493.7
#3	1811.2	4736.5	37400.	7542.2

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/27/2017 12:24:07 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2548**	**38.68**	**1.950**	**1.955**	**1.983**	**39.29**	**1.980**	**1.960**	**1.991**
Stddev	.0011	.05	.007	.006	.002	.18	.005	.006	.005
%RSD	.4500	.1272	.3423	.3099	.0836	.4489	.2712	.3275	.2470
#1	.2561	38.62	1.953	1.949	1.982	39.46	1.983	1.962	1.992
#2	.2543	38.71	1.943	1.961	1.981	39.11	1.974	1.953	1.996
#3	.2539	38.70	1.955	1.953	1.984	39.28	1.984	1.965	1.987
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.915**	**39.27**	**38.92**	**39.18**	**2.010**	**2.023**	**38.88**	**1.971**	**1.955**
Stddev	.004	.06	.05	.27	.006	.007	.00	.006	.004
%RSD	.2013	.1529	.1211	.6912	.3039	.3458	.0009	.2994	.2163
#1	1.919	39.31	38.93	39.40	2.006	2.020	38.88	1.973	1.951
#2	1.911	39.20	38.96	38.88	2.008	2.018	38.88	1.965	1.960
#3	1.916	39.30	38.87	39.27	2.017	2.031	38.88	1.976	1.955
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.946**	**1.954**	**2.494**	**2.049**	**2.055**	**2.056**	**1.953**	**2.059**	**1.998**
Stddev	.006	.012	.008	.006	.003	.002	.002	.009	.008
%RSD	.3343	.6139	.3041	.2860	.1314	.0985	.1235	.4424	.3828
#1	1.946	1.959	2.487	2.051	2.053	2.054	1.950	2.055	1.998
#2	1.940	1.940	2.492	2.042	2.058	2.055	1.955	2.052	1.990
#3	1.953	1.962	2.502	2.053	2.055	2.058	1.954	2.069	2.005
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/27/2017 12:24:07 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1727.1**	**3921.1**	**31449.**	**6340.9**
Stddev	2.5	12.6	28.	44.5
%RSD	.14553	.32091	.08868	.70148
#1	1724.2	3909.6	31417.	6293.6
#2	1728.7	3934.5	31460.	6381.9
#3	1728.3	3919.2	31469.	6347.2

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/27/2017 12:28:18 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0002**	**-.0039**	**-.0001**	**-.0002**	**-.0001**	**-.0034**	**-.0001**	**-.0001**	**-.0001**
Stddev	.0001	.0027	.0010	.0002	.0000	.0014	.0000	.0001	.0004
%RSD	36.22	70.26	1243.	77.21	55.97	40.99	28.66	73.95	325.5
#1	-.0002	-.0030	.0002	-.0001	-.0001	-.0030	-.0001	-.0001	-.0001
#2	-.0003	-.0017	.0008	-.0004	.0000	-.0050	-.0001	-.0001	.0003
#3	-.0001	-.0069	-.0012	-.0001	-.0001	-.0023	-.0001	.0000	-.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0033**	**-.0117**	**.0089**	**-.0001**	**.0003**	**.0137**	**-.0002**	**-.0002**
Stddev	.0002	.0026	.0049	.0354	.0000	.0006	.0029	.0000	.0009
%RSD	208.0	78.39	41.90	398.5	18.35	162.7	21.00	10.56	420.7
#1	.0002	.0061	-.0169	-.0319	-.0001	.0010	.0129	-.0002	.0007
#2	.0002	.0012	-.0109	.0268	-.0001	.0002	.0113	-.0002	-.0011
#3	-.0001	.0024	-.0072	.0317	-.0001	-.0001	.0169	-.0003	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0004**	**.0020**	**-.0005**	**-.0001**	**.0002**	**-.0003**	**-.0002**	**-.0004**
Stddev	.0008	.0006	.0004	.0001	.0001	.0001	.0013	.0001	.0000
%RSD	281.0	151.8	22.67	25.83	57.62	32.15	377.3	83.44	3.642
#1	.0011	.0011	.0024	-.0004	-.0002	.0002	-.0001	-.0003	-.0004
#2	.0004	.0001	.0020	-.0006	-.0001	.0001	.0008	.0000	-.0004
#3	-.0006	.0000	.0015	-.0005	.0000	.0002	-.0017	-.0001	-.0004
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/27/2017 12:28:18 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1816.2**	**4051.5**	**31975.**	**6513.8**
Stddev	3.0	6.7	52.	18.4
%RSD	.16656	.16603	.16277	.28303
#1	1813.2	4047.3	31988.	6492.6
#2	1819.3	4059.3	31918.	6526.0
#3	1816.2	4048.0	32019.	6522.7

Zoom In Zoom Out

Sample Name: MP31553-D1 Acquired: 1/27/2017 12:32:51 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0031**	**138.9**	**.1276**	**1.777**	**.0313**	**287.6**	**.0027**	**.0895**	**.1579**
Stddev	.0009	.3	.0023	.005	.0006	.1	.0007	.0008	.0040
%RSD	28.14	.1887	1.768	.3072	1.860	.0238	26.78	.9419	2.540
#1	-.0025	138.7	.1265	1.773	.0317	287.7	.0026	.0900	.1533
#2	-.0040	139.2	.1302	1.776	.0306	287.6	.0020	.0899	.1595
#3	-.0026	138.8	.1261	1.783	.0315	287.6	.0035	.0885	.1608

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.2446**	**284.1**	**43.09**	**84.18**	**6.360**	**.0021**	**1.429**	**.1628**	**.6060**
Stddev	.0022	.7	.11	.20	.010	.0013	.075	.0008	.0106
%RSD	.9131	.2495	.2450	.2393	.1516	61.44	5.249	.4621	1.748
#1	.2423	284.0	42.98	84.28	6.349	.0034	1.353	.1637	.6182
#2	.2467	284.8	43.19	83.95	6.367	.0009	1.503	.1626	.6008
#3	.2449	283.4	43.10	84.32	6.363	.0018	1.432	.1622	.5989

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0105**	**-.0346**	**3.166**	**.0373**	**.6183**	**4.975**	**-.0158**	**.3302**	**2.760**
Stddev	.0082	.0047	.014	.0022	.0012	.012	.0225	.0028	.006
%RSD	78.00	13.49	.4530	5.890	.1923	.2404	142.2	.8464	.2364
#1	.0135	-.0385	3.150	.0348	.6185	4.963	-.0098	.3278	2.754
#2	.0012	-.0294	3.176	.0379	.6195	4.975	-.0407	.3333	2.767
#3	.0168	-.0360	3.172	.0391	.6171	4.987	.0030	.3296	2.760

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1805.6**	**4396.4**	**35184.**	**7188.3**
Stddev	2.1	7.3	25.	22.0
%RSD	.11884	.16514	.07013	.30575
#1	1803.6	4394.5	35184.	7206.4
#2	1805.3	4404.5	35209.	7163.8
#3	1807.8	4390.3	35160.	7194.5

Zoom In Zoom Out

Sample Name: MP31553-S1 Acquired: 1/27/2017 12:37:15 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0400**	**216.4**	**1.954**	**3.996**	**.0868**	**393.8**	**.0502**	**.5640**	**.3866**
Stddev	.0019	.7	.010	.008	.0005	1.4	.0007	.0015	.0038
%RSD	4.870	.3230	.4963	.2010	.5321	.3443	1.326	.2693	.9841
#1	.0422	216.3	1.948	3.988	.0863	392.5	.0504	.5631	.3840
#2	.0388	217.1	1.948	4.004	.0868	395.2	.0495	.5633	.3849
#3	.0389	215.7	1.965	3.997	.0872	393.7	.0508	.5658	.3910

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.5492**	**373.0**	**79.80**	**128.6**	**8.185**	**.4260**	**26.52**	**.6798**	**1.283**
Stddev	.0058	1.1	.36	.6	.020	.0017	.08	.0028	.008
%RSD	1.065	.2905	.4494	.4938	.2447	.4022	.3091	.4152	.6332
#1	.5464	371.9	79.52	128.5	8.176	.4243	26.42	.6782	1.291
#2	.5559	374.0	80.21	129.2	8.171	.4277	26.56	.6831	1.281
#3	.5452	373.2	79.68	128.0	8.208	.4259	26.57	.6781	1.275

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.1476**	**1.778**	**3.058**	**.5165**	**1.209**	**7.786**	**2.056**	**.8308**	**3.253**
Stddev	.0067	.014	.008	.0046	.004	.015	.020	.0021	.003
%RSD	4.548	.8005	.2653	.8819	.3364	.1949	.9848	.2578	.0910
#1	.1516	1.781	3.067	.5145	1.205	7.771	2.036	.8332	3.250
#2	.1513	1.791	3.051	.5217	1.213	7.787	2.076	.8302	3.256
#3	.1398	1.763	3.056	.5133	1.210	7.801	2.056	.8290	3.253

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1730.2**	**4399.8**	**34833.**	**7035.8**
Stddev	4.1	3.6	59.	31.3
%RSD	.23555	.08289	.16961	.44545
#1	1731.0	4400.1	34871.	7064.7
#2	1725.7	4395.9	34864.	7002.5
#3	1733.8	4403.2	34765.	7040.3

Zoom In Zoom Out

Sample Name: MP31553-S2 Acquired: 1/27/2017 12:41:35 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0352**	**213.9**	**1.929**	**3.972**	**.0860**	**381.9**	**.0493**	**.5548**	**.3793**
Stddev	.0021	.2	.002	.009	.0006	.1	.0004	.0038	.0024
%RSD	6.085	.0845	.1201	.2194	.7485	.0327	.7196	.6875	.6363
#1	.0339	214.1	1.928	3.965	.0853	382.0	.0495	.5528	.3817
#2	.0341	213.8	1.932	3.981	.0861	381.8	.0489	.5523	.3793
#3	.0377	213.9	1.927	3.968	.0865	381.9	.0494	.5592	.3769

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.5826**	**377.1**	**78.95**	**127.7**	**8.150**	**.4145**	**25.99**	**.6624**	**1.250**
Stddev	.0043	.8	.14	.3	.013	.0027	.08	.0003	.005
%RSD	.7327	.2120	.1760	.2353	.1574	.6536	.3207	.0387	.4412
#1	.5781	377.9	78.93	127.7	8.164	.4120	25.90	.6626	1.244
#2	.5830	376.3	78.83	127.5	8.149	.4142	25.98	.6621	1.255
#3	.5867	377.0	79.10	128.1	8.138	.4174	26.07	.6625	1.250

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.1417**	**1.733**	**3.338**	**.5048**	**1.191**	**7.746**	**2.029**	**.8283**	**3.150**
Stddev	.0029	.025	.028	.0006	.004	.018	.016	.0055	.010
%RSD	2.023	1.419	.8266	.1190	.3454	.2362	.7784	.6669	.3060
#1	.1421	1.708	3.324	.5046	1.190	7.766	2.045	.8345	3.159
#2	.1444	1.735	3.319	.5054	1.195	7.730	2.029	.8240	3.140
#3	.1387	1.757	3.369	.5043	1.187	7.743	2.014	.8263	3.151

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1794.9**	**4595.4**	**36453.**	**7306.5**
Stddev	1.1	16.8	133.	47.3
%RSD	.06215	.36471	.36557	.64753
#1	1794.7	4605.9	36396.	7299.5
#2	1796.1	4604.2	36357.	7356.9
#3	1793.9	4576.1	36605.	7263.1

Zoom In Zoom Out

Sample Name: MP31553-PS1 Acquired: 1/27/2017 12:45:56 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0354**	**206.2**	**.2536**	**2.849**	**.0940**	**432.1**	**.0499**	**.1711**	**.2653**
Stddev	.0009	.5	.0052	.009	.0003	.5	.0003	.0002	.0062
%RSD	2.584	.2468	2.060	.3158	.3476	.1209	.6804	.1113	2.335
#1	.0348	206.4	.2503	2.855	.0941	432.2	.0502	.1712	.2725
#2	.0365	205.6	.2597	2.839	.0943	432.6	.0498	.1709	.2618
#3	.0351	206.5	.2509	2.853	.0936	431.6	.0495	.1712	.2617

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.4973**	**435.2**	**73.60**	**132.3**	**10.04**	**.3690**	**11.01**	**.3342**	**1.013**
Stddev	.0040	.7	.36	.6	.03	.0003	.04	.0009	.002
%RSD	.8068	.1704	.4957	.4249	.3299	.0706	.3586	.2610	.1627
#1	.4991	436.0	73.82	131.9	10.07	.3687	10.97	.3340	1.012
#2	.4927	434.5	73.80	132.1	10.01	.3691	11.01	.3333	1.012
#3	.5001	435.2	73.18	132.9	10.04	.3692	11.05	.3351	1.015

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.1047**	**.0439**	**3.876**	**.0956**	**.8975**	**6.827**	**.1109**	**.5056**	**3.477**
Stddev	.0067	.0011	.018	.0017	.0031	.015	.0027	.0039	.020
%RSD	6.382	2.400	.4708	1.816	.3483	.2148	2.402	.7649	.5644
#1	.1047	.0450	3.861	.0951	.8956	6.842	.1112	.5099	3.493
#2	.1113	.0429	3.871	.0942	.9011	6.813	.1133	.5023	3.455
#3	.0979	.0440	3.897	.0976	.8958	6.825	.1080	.5046	3.482

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1789.8**	**4658.0**	**37328.**	**7519.1**
Stddev	3.3	8.9	56.	21.4
%RSD	.18434	.19056	.15007	.28451
#1	1787.4	4666.2	37366.	7495.3
#2	1788.5	4659.2	37354.	7536.7
#3	1793.6	4648.6	37264.	7525.4

Zoom In Zoom Out

Sample Name: MP31553-SD1 Acquired: 1/27/2017 12:50:16 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 50.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0248**	**241.6**	**.1623**	**3.131**	**.0529**	**511.8**	**-.0045**	**.1481**	**.2586**
Stddev	.0132	1.2	.0249	.031	.0011	.4	.0019	.0015	.0029
%RSD	53.45	.5038	15.33	.9847	2.057	.0758	42.62	1.034	1.104
#1	-.0173	240.3	.1686	3.096	.0517	511.9	-.0027	.1466	.2577
#2	-.0169	241.7	.1834	3.151	.0539	511.4	-.0066	.1480	.2618
#3	-.0400	242.7	.1349	3.147	.0531	512.1	-.0043	.1497	.2564

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.4788**	**521.8**	**73.37**	**150.1**	**12.00**	**.2424**	**2.263**	**.2848**	**.9874**
Stddev	.0225	2.8	1.11	.4	.05	.0090	.167	.0037	.0156
%RSD	4.691	.5311	1.511	.2622	.4279	3.715	7.368	1.302	1.576
#1	.4572	519.1	73.83	149.9	12.06	.2474	2.090	.2852	.9740
#2	.4772	521.8	72.10	149.9	11.96	.2477	2.422	.2883	1.004
#3	.5021	524.6	74.17	150.6	11.98	.2320	2.275	.2809	.9837

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0031**	**-.0235**	**4.564**	**.0310**	**1.005**	**7.957**	**-.0728**	**.5402**	**4.235**
Stddev	.0361	.0359	.039	.0157	.004	.010	.0103	.0088	.016
%RSD	1153.	152.9	.8436	50.88	.4425	.1290	14.16	1.636	.3822
#1	.0251	-.0033	4.571	.0129	1.006	7.959	-.0801	.5376	4.216
#2	.0228	-.0022	4.598	.0420	.9997	7.967	-.0775	.5330	4.245
#3	-.0385	-.0649	4.522	.0379	1.008	7.946	-.0610	.5501	4.244

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1824.6**	**4175.6**	**33179.**	**6755.6**
Stddev	3.3	11.9	63.	24.3
%RSD	.18307	.28569	.19012	.35992
#1	1821.0	4189.3	33140.	6762.6
#2	1825.0	4167.1	33251.	6775.7
#3	1827.7	4170.6	33144.	6728.6

Zoom In Zoom Out

Sample Name: FA39850-35T Acquired: 1/27/2017 12:54:43 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	**-.0009**	**173.9**	**.0307**	**.9177**	**.0068**	**17.97**	**-.0016**	**.1145**
Stddev	.0002	.3	.0012	.0009	.0001	.00	.0001	.0005
%RSD	18.53	.1838	3.857	.0964	1.149	.0262	9.519	.4433
#1	-.0008	174.1	.0298	.9172	.0069	17.98	-.0014	.1150
#2	-.0011	173.5	.0321	.9172	.0068	17.97	-.0017	.1140
#3	-.0007	174.0	.0304	.9187	.0067	17.98	-.0016	.1143

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	**.3635**	**.3989**	**240.3**	**23.16**	**51.27**	**F 5.929**	**.0043**	**1.044**
Stddev	.0030	.0005	.2	.02	.14	.010	.0002	.004
%RSD	.8127	.1154	.0950	.0836	.2811	.1733	5.169	.4152
#1	.3614	.3988	240.5	23.17	51.34	5.927	.0045	1.041
#2	.3623	.3985	240.1	23.13	51.37	5.941	.0043	1.049
#3	.3669	.3994	240.2	23.17	51.11	5.920	.0040	1.042

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	**.3818**	**.3242**	**.0054**	**F -.0273**	**1.064**	**.0192**	**.0883**	**F 8.656**
Stddev	.0009	.0031	.0013	.0028	.005	.0004	.0004	.051
%RSD	.2481	.9558	24.24	10.24	.4753	1.874	.4158	.5859
#1	.3829	.3207	.0054	-.0299	1.070	.0194	.0882	8.600
#2	.3811	.3262	.0066	-.0243	1.060	.0194	.0879	8.671
#3	.3814	.3259	.0040	-.0277	1.063	.0188	.0886	8.698

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	**-.0019**	**.3919**	**.7166**
Stddev	.0024	.0015	.0009
%RSD	125.0	.3881	.1290
#1	-.0005	.3929	.7159
#2	-.0006	.3902	.7176
#3	-.0047	.3926	.7162

Zoom In Zoom Out

Sample Name: FA39850-35T Acquired: 1/27/2017 12:54:43 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1684.7**	**5335.4**	**42762.**	**8786.1**
Stddev	4.0	18.3	82.	8.2
%RSD	.23493	.34362	.19176	.09389
#1	1684.3	5316.5	42842.	8792.4
#2	1681.0	5336.5	42767.	8789.2
#3	1688.8	5353.1	42678.	8776.8

Zoom In Zoom Out

Sample Name: FA39850-38T Acquired: 1/27/2017 12:59:21 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0023**	**110.2**	**.1160**	F **7.028**	**.0111**	**38.28**	**.0042**	**.1191**	**.2488**
Stddev	.0001	.5	.0021	.147	.0000	.17	.0001	.0002	.0002
%RSD	5.190	.4523	1.811	2.098	.3855	.4447	2.177	.1860	.0648
#1	.0023	110.2	.1168	6.863	.0111	38.14	.0042	.1188	.2489
#2	.0022	109.7	.1176	7.072	.0110	38.23	.0042	.1192	.2486
#3	.0024	110.7	.1136	7.148	.0111	38.47	.0041	.1192	.2487

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.5688**	**126.9**	**14.61**	**15.84**	**1.965**	**.0328**	**2.724**	**.2914**	F **5.056**
Stddev	.0020	.7	.06	.08	.005	.0002	.006	.0004	.001
%RSD	.3536	.5374	.4092	.4808	.2419	.5868	.2395	.1260	.0247
#1	.5703	126.5	14.60	15.82	1.968	.0329	2.731	.2914	5.057
#2	.5696	126.6	14.56	15.77	1.968	.0328	2.718	.2911	5.056
#3	.5665	127.7	14.68	15.92	1.960	.0326	2.723	.2918	5.054

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0134**	**.0081**	**1.277**	**.1505**	**.9520**	**2.803**	**-.0019**	**.3291**	**3.662**
Stddev	.0001	.0014	.003	.0009	.0016	.011	.0008	.0005	.012
%RSD	1.077	16.89	.2654	.5814	.1633	.3737	41.18	.1562	.3313
#1	.0134	.0066	1.274	.1499	.9534	2.814	-.0026	.3297	3.649
#2	.0132	.0083	1.281	.1501	.9503	2.801	-.0010	.3287	3.665
#3	.0135	.0093	1.277	.1515	.9523	2.794	-.0022	.3290	3.673

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1739.5**	**5075.1**	**40141.**	**8118.2**
Stddev	4.6	15.1	145.	83.5
%RSD	.26474	.29660	.36089	1.0281
#1	1739.4	5079.5	40239.	8164.5
#2	1735.0	5058.3	39974.	8168.2
#3	1744.2	5087.4	40209.	8021.8

Zoom In Zoom Out

Sample Name: FA39850-25T Acquired: 1/27/2017 13:03:50 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0030**	**114.2**	**.1625**	**12.87**	**.0181**	**49.97**	**.0040**	**.1293**	**.5481**
Stddev	.0033	.1	.0055	.01	.0003	.20	.0000	.0006	.0004
%RSD	110.1	.0771	3.384	.0829	1.572	.3998	.9471	.4505	.0667
#1	.0057	114.3	.1688	12.88	.0184	49.99	.0039	.1289	.5485
#2	-.0007	114.1	.1587	12.86	.0181	49.77	.0040	.1290	.5482
#3	.0040	114.2	.1601	12.87	.0179	50.17	.0039	.1300	.5478

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**1.235**	**439.2**	**9.018**	**12.93**	**4.505**	**.0678**	**3.653**	**.7818**	**25.43**
Stddev	.008	1.6	.078	.08	.009	.0025	.050	.0013	.17
%RSD	.6609	.3672	.8679	.5999	.2041	3.687	1.372	.1715	.6500
#1	1.226	439.7	8.930	12.87	4.515	.0666	3.602	.7807	25.39
#2	1.236	437.5	9.043	13.02	4.504	.0662	3.654	.7814	25.29
#3	1.242	440.6	9.080	12.91	4.497	.0707	3.702	.7833	25.61

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0252**	**-.0280**	**2.543**	**3.531**	**1.452**	**2.865**	**-.0196**	**.4395**	**23.00**
Stddev	.0012	.0084	.007	.016	.002	.005	.0136	.0033	.13
%RSD	4.789	30.01	.2808	.4491	.1632	.1866	69.36	.7527	.5611
#1	.0255	-.0370	2.539	3.514	1.454	2.871	-.0111	.4432	22.95
#2	.0262	-.0204	2.551	3.533	1.452	2.864	-.0125	.4367	22.90
#3	.0239	-.0266	2.539	3.546	1.450	2.861	-.0353	.4387	23.15

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1754.5**	**4057.9**	**31720.**	**6292.6**
Stddev	3.8	7.1	83.	32.6
%RSD	.21483	.17468	.26103	.51755
#1	1750.2	4050.5	31721.	6290.8
#2	1757.1	4058.5	31637.	6326.1
#3	1756.2	4064.7	31803.	6261.0

Zoom In Zoom Out

Sample Name: MP31557-MB1 Acquired: 1/27/2017 13:08:11 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0008**	**-.0050**	**-.0017**	**-.0001**	**-.0001**	**.0035**	**-.0002**	**-.0002**	**.0000**
Stddev	.0000	.0114	.0002	.0001	.0000	.0006	.0000	.0000	.0004
%RSD	2.056	225.6	12.93	117.5	4.111	17.26	11.40	13.19	762.6
#1	-.0008	-.0003	-.0017	.0000	-.0001	.0040	-.0002	-.0002	.0004
#2	-.0008	-.0180	-.0015	-.0001	-.0001	.0036	-.0002	-.0002	.0001
#3	-.0008	.0032	-.0019	-.0002	-.0001	.0029	-.0002	-.0001	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0007**	**.0055**	**-.0493**	**.0111**	**-.0001**	**-.0021**	**-.0070**	**-.0002**	**-.0002**
Stddev	.0003	.0026	.0061	.0073	.0000	.0002	.0066	.0001	.0005
%RSD	44.50	46.22	12.40	65.78	21.80	10.46	93.30	56.02	247.8
#1	.0005	.0080	-.0552	.0073	-.0001	-.0019	-.0137	-.0001	.0004
#2	.0005	.0057	-.0496	.0065	.0000	-.0021	-.0069	-.0002	-.0006
#3	.0010	.0029	-.0430	.0195	-.0001	-.0023	-.0006	-.0004	-.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**.0006**	**.0052**	**-.0003**	**-.0002**	**.0004**	**-.0031**	**-.0001**	**.0000**
Stddev	.0004	.0006	.0005	.0002	.0000	.0001	.0011	.0002	.0001
%RSD	624.2	110.2	8.887	77.77	12.19	13.96	37.03	124.0	180.5
#1	.0001	.0002	.0052	.0000	-.0002	.0004	-.0019	-.0003	.0001
#2	.0003	.0013	.0056	-.0004	-.0002	.0004	-.0031	-.0002	.0000
#3	-.0006	.0003	.0047	-.0004	-.0002	.0003	-.0042	.0001	.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: MP31557-MB1 Acquired: 1/27/2017 13:08:11 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1772.1	3952.8	31277.	6455.8
Stddev	4.2	7.6	89.	14.7
%RSD	.23864	.19125	.28545	.22841
#1	1767.6	3946.3	31332.	6460.8
#2	1772.8	3961.1	31326.	6439.3
#3	1776.0	3951.2	31174.	6467.5

Zoom In Zoom Out

Sample Name: MP31557-B1 Acquired: 1/27/2017 13:12:45 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0473	29.71	2.078	2.165	.0540	27.98	.0520	.5206	.2107
Stddev	.0005	.04	.004	.003	.0003	.04	.0001	.0010	.0016
%RSD	.9879	.1411	.2079	.1421	.5194	.1352	.1604	.1839	.7426
#1	.0472	29.69	2.082	2.163	.0543	27.95	.0519	.5196	.2096
#2	.0478	29.68	2.074	2.169	.0537	28.02	.0521	.5207	.2125
#3	.0469	29.76	2.080	2.164	.0540	27.98	.0520	.5215	.2099
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2598	29.08	27.69	27.02	.5358	.5544	27.63	.5282	.5095
Stddev	.0006	.04	.06	.08	.0016	.0012	.04	.0007	.0003
%RSD	.2476	.1366	.2290	.3094	.3067	.2126	.1486	.1386	.0659
#1	.2590	29.04	27.62	27.01	.5340	.5530	27.58	.5276	.5091
#2	.2602	29.09	27.71	27.10	.5373	.5549	27.66	.5290	.5097
#3	.2602	29.12	27.75	26.94	.5361	.5553	27.64	.5281	.5098
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5268	2.050	.0650	.5564	.5555	.5417	2.027	.5000	.5246
Stddev	.0032	.004	.0008	.0014	.0010	.0025	.013	.0019	.0007
%RSD	.6053	.1713	1.207	.2450	.1750	.4579	.6534	.3854	.1353
#1	.5251	2.049	.0653	.5551	.5549	.5389	2.015	.4984	.5243
#2	.5247	2.048	.0642	.5578	.5566	.5430	2.041	.5022	.5241
#3	.5304	2.055	.0656	.5564	.5550	.5433	2.025	.4995	.5254
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: MP31557-B1 Acquired: 1/27/2017 13:12:45 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1735.9	3885.8	31405.	6397.5
Stddev	4.5	3.3	27.	7.5
%RSD	.26160	.08583	.08469	.11767
#1	1734.9	3883.9	31404.	6392.9
#2	1732.0	3883.8	31378.	6393.5
#3	1740.9	3889.6	31432.	6406.2

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/27/2017 13:16:57 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2543	38.28	1.935	1.971	1.956	38.87	1.960	1.945	1.960
Stddev	.0011	.17	.007	.005	.006	.10	.005	.004	.002
%RSD	.4329	.4354	.3660	.2647	.3119	.2513	.2493	.1913	.0920
#1	.2541	38.47	1.944	1.977	1.962	38.98	1.965	1.948	1.958
#2	.2533	38.15	1.932	1.970	1.954	38.85	1.960	1.945	1.959
#3	.2554	38.23	1.930	1.966	1.950	38.78	1.955	1.941	1.962
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.893	38.83	38.58	38.23	1.988	2.014	38.72	1.951	1.935
Stddev	.001	.08	.18	.16	.004	.005	.17	.005	.002
%RSD	.0671	.2160	.4628	.4145	.2120	.2699	.4288	.2475	.1117
#1	1.892	38.91	38.78	38.21	1.993	2.020	38.89	1.956	1.934
#2	1.894	38.74	38.50	38.08	1.984	2.014	38.70	1.951	1.933
#3	1.892	38.85	38.44	38.40	1.987	2.009	38.56	1.946	1.937
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.932	1.939	2.472	2.032	2.030	2.010	1.938	2.028	1.973
Stddev	.005	.003	.007	.004	.012	.001	.003	.006	.005
%RSD	.2816	.1705	.2933	.1961	.5815	.0449	.1455	.2998	.2587
#1	1.938	1.942	2.477	2.036	2.043	2.009	1.936	2.033	1.976
#2	1.931	1.938	2.474	2.030	2.026	2.011	1.941	2.021	1.975
#3	1.928	1.936	2.463	2.028	2.020	2.010	1.937	2.029	1.967
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/27/2017 13:16:57 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1732.8**	**3935.4**	**31812.**	**6427.5**
Stddev	1.6	14.0	63.	21.0
%RSD	.09033	.35630	.19937	.32731
#1	1732.6	3925.8	31805.	6412.9
#2	1731.3	3928.9	31878.	6451.6
#3	1734.4	3951.5	31752.	6418.1

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/27/2017 13:21:08 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**.0012**	**-.0002**	**-.0001**	**.0000**	**-.0021**	**-.0001**	**.0000**	**-.0003**
Stddev	.000	.0051	.0004	.0001	.0001	.0009	.0000	.0001	.0003
%RSD	207.2	415.0	154.7	207.9	271.5	43.67	46.46	587.0	86.11
#1	-.0001	-.0043	-.0006	-.0001	.0000	-.0027	.0000	.0000	.0000
#2	-.0001	.0023	.0002	-.0001	.0001	-.0026	-.0001	.0001	-.0003
#3	.0001	.0058	-.0003	.0001	.0000	-.0010	-.0001	-.0001	-.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0029**	**-.0349**	**.0131**	**.0000**	**.0003**	**-.0052**	**-.0001**	**-.0007**
Stddev	.0001	.0022	.0364	.0080	.0000	.0006	.0050	.0000	.0002
%RSD	33.23	76.59	104.4	60.79	26.26	227.4	96.77	15.03	29.75
#1	.0003	.0050	-.0651	.0111	.0000	.0008	-.0058	-.0001	-.0005
#2	.0002	.0028	-.0452	.0219	.0000	.0002	.0001	-.0001	-.0007
#3	.0004	.0007	.0056	.0063	.0000	-.0003	-.0099	-.0001	-.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0011**	**.0016**	**-.0004**	**.0000**	**.0003**	**-.0009**	**.0000**	**-.0004**
Stddev	.0001	.0003	.0004	.0003	.000	.0002	.0013	.0002	.0001
%RSD	157.1	25.96	27.37	69.08	135.7	47.83	145.9	1297.	13.79
#1	.0002	.0008	.0018	-.0006	-.0001	.0005	-.0023	.0001	-.0003
#2	.0000	.0012	.0011	-.0001	-.0001	.0004	.0002	.0002	-.0004
#3	.0000	.0013	.0019	-.0006	.0000	.0002	-.0005	-.0002	-.0004
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/27/2017 13:21:08 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1822.5**	**4081.0**	**32068.**	**6447.3**
Stddev	2.0	7.3	57.	50.2
%RSD	.10769	.17781	.17698	.77828
#1	1824.4	4085.3	32094.	6496.2
#2	1822.7	4072.6	32107.	6396.0
#3	1820.4	4085.1	32003.	6449.7

Zoom In Zoom Out

Sample Name: ICV Acquired: 1/27/2017 13:50:48 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2565**	**42.05**	**2.019**	**2.069**	**2.055**	**42.31**	**2.017**	**2.022**	**2.029**
Stddev	.0011	.12	.003	.003	.003	.05	.003	.004	.015
%RSD	.4206	.2773	.1378	.1349	.1418	.1088	.1541	.2004	.7378
#1	.2552	41.94	2.016	2.066	2.053	42.30	2.014	2.018	2.040
#2	.2571	42.17	2.020	2.071	2.058	42.28	2.017	2.023	2.034
#3	.2572	42.05	2.021	2.071	2.053	42.37	2.020	2.026	2.012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.012**	**41.46**	**41.45**	**42.26**	**2.054**	**1.970**	**41.34**	**2.013**	**2.031**
Stddev	.002	.07	.06	.15	.007	.007	.06	.002	.007
%RSD	.1044	.1684	.1453	.3461	.3549	.3706	.1456	.1156	.3529
#1	2.014	41.39	41.40	42.11	2.059	1.962	41.27	2.010	2.035
#2	2.011	41.48	41.52	42.27	2.057	1.974	41.39	2.013	2.036
#3	2.010	41.53	41.43	42.40	2.045	1.975	41.37	2.015	2.023
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.018**	**2.029**	**.1311**	**2.028**	**1.970**	**2.010**	**2.070**	**2.111**	**2.006**
Stddev	.010	.007	.0005	.005	.003	.010	.006	.012	.004
%RSD	.4899	.3616	.4126	.2561	.1349	.5016	.3005	.5562	.1827
#1	2.006	2.020	.1306	2.027	1.968	2.022	2.073	2.120	2.002
#2	2.023	2.033	.1311	2.024	1.973	2.006	2.073	2.116	2.005
#3	2.024	2.033	.1317	2.034	1.968	2.003	2.062	2.098	2.010
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: ICV Acquired: 1/27/2017 13:50:48 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1715.1	3921.7	31452.	6290.5
Stddev	6.6	5.7	92.	11.6
%RSD	.38719	.14554	.29108	.18510
#1	1710.8	3925.1	31355.	6301.5
#2	1711.8	3915.1	31464.	6291.6
#3	1722.8	3924.9	31537.	6278.3

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/27/2017 13:57:32 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2533	38.78	1.937	1.965	1.972	39.05	1.961	1.950	1.972
Stddev	.0002	.10	.001	.005	.001	.07	.002	.002	.006
%RSD	.0886	.2489	.0723	.2429	.0588	.1667	.0952	.1223	.3130
#1	.2534	38.75	1.937	1.964	1.972	39.12	1.959	1.950	1.965
#2	.2531	38.89	1.939	1.970	1.973	39.03	1.963	1.953	1.978
#3	.2535	38.71	1.936	1.961	1.970	38.99	1.961	1.948	1.972
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.929	39.48	38.34	39.04	1.990	2.017	38.49	1.953	1.938
Stddev	.004	.08	.04	.04	.004	.003	.06	.005	.005
%RSD	.2120	.1968	.1098	.0906	.1910	.1453	.1496	.2500	.2734
#1	1.933	39.51	38.38	39.07	1.987	2.016	38.55	1.948	1.942
#2	1.931	39.54	38.35	39.00	1.994	2.020	38.49	1.958	1.932
#3	1.925	39.39	38.30	39.04	1.988	2.014	38.43	1.952	1.939
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.930	1.946	2.486	2.030	2.034	2.042	1.945	2.039	1.964
Stddev	.001	.003	.007	.002	.004	.004	.007	.006	.003
%RSD	.0556	.1639	.2767	.0858	.1904	.1870	.3405	.3100	.1724
#1	1.929	1.943	2.485	2.032	2.036	2.039	1.952	2.035	1.961
#2	1.931	1.950	2.493	2.031	2.036	2.046	1.939	2.046	1.968
#3	1.931	1.946	2.479	2.028	2.029	2.040	1.944	2.036	1.964
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/27/2017 13:57:32 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1724.1	3950.0	31507.	6319.8
Stddev	3.3	3.1	7.	16.7
%RSD	.19138	.07971	.02085	.26498
#1	1720.6	3953.3	31511.	6323.0
#2	1727.2	3949.5	31499.	6301.7
#3	1724.5	3947.1	31511.	6334.7

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/27/2017 14:05:00 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0054	-.0004	.0002	.0000	-.0002	.0000	.0000	.0000
Stddev	.0002	.0052	.0007	.0002	.000	.0036	.0000	.000	.001
%RSD	84.40	95.24	169.0	83.37	13090.	1464.	162.4	1629.	2089.
#1	.0000	.0023	.0003	.0001	.0000	-.0035	.0000	.0001	-.0003
#2	.0005	.0114	-.0011	.0004	.0000	.0036	.0001	.0000	.0006
#3	.0004	.0026	-.0005	.0002	-.0001	-.0008	.0000	-.0001	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0024	.0110	.0117	.0000	.0008	.0147	.0000	.0005
Stddev	.0003	.0009	.0165	.0059	.0000	.0002	.0036	.0000	.0002
%RSD	110.3	35.45	150.7	50.34	151.6	29.00	24.41	110.6	48.33
#1	-.0004	.0031	.0301	.0159	.0000	.0005	.0164	.0000	.0008
#2	.0001	.0015	.0007	.0143	.0000	.0008	.0106	.0001	.0003
#3	-.0004	.0026	.0021	.0050	.0000	.0010	.0171	.0000	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	F .0023	.0003	.0004	.0001	.0002	-.0008	.0001	.0000
Stddev	.0011	.0006	.0004	.0003	.0000	.0001	.0002	.0001	.0001
%RSD	193.0	24.43	162.0	59.56	48.68	51.26	22.68	148.0	175.7
#1	.0018	.0026	-.0001	.0007	.0001	.0003	-.0008	.0001	.0001
#2	.0001	.0026	.0001	.0005	.0000	.0001	-.0007	.0000	.0000
#3	-.0002	.0017	.0007	.0002	.0001	.0002	-.0011	.0001	.0000
Check ?	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.0020							
Low Limit		-.0020							

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/27/2017 14:05:00 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1827.2**	**4104.4**	**31996.**	**6300.1**
Stddev	2.6	1.6	136.	41.6
%RSD	.14234	.03942	.42397	.66042
#1	1824.2	4103.3	31935.	6289.7
#2	1829.1	4106.2	31901.	6264.8
#3	1828.2	4103.6	32152.	6346.0

Zoom In Zoom Out

Sample Name: FA40645-1 Acquired: 1/27/2017 14:09:44 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0000**	**.0101**	**.0071**	**.0177**	**.0000**	**86.36**	**-.0002**	**-.0002**	**.0003**
Stddev	.0003	.0007	.0012	.0001	.000	.10	.0001	.0001	.0002
%RSD	767.5	6.950	16.44	.7686	88.70	.1185	38.41	53.19	59.39
#1	-.0003	.0102	.0064	.0175	.0000	86.47	-.0002	-.0001	.0003
#2	.0003	.0093	.0064	.0178	.0000	86.36	-.0002	-.0003	.0004
#3	.0001	.0107	.0085	.0177	.0000	86.27	-.0003	-.0002	.0001

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0008**	**7.268**	**1.454**	**9.744**	**.0285**	**.0110**	**51.94**	**-.0005**	**-.0002**
Stddev	.0003	.015	.015	.041	.0001	.0001	.10	.0000	.0004
%RSD	33.12	.2030	1.036	.4154	.4690	1.019	.1983	3.303	243.5
#1	.0011	7.255	1.469	9.776	.0287	.0110	52.05	-.0005	.0001
#2	.0005	7.264	1.439	9.757	.0285	.0111	51.90	-.0005	.0000
#3	.0009	7.284	1.456	9.698	.0285	.0109	51.86	-.0005	-.0006

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0008**	**.0017**	**5.388**	**.0007**	**1.677**	**.0011**	**-.0006**	**.0000**	**.0004**
Stddev	.0005	.0013	.007	.0005	.003	.0000	.0006	.0001	.0000
%RSD	61.10	74.70	.1231	67.20	.1874	1.556	103.4	242.3	12.76
#1	.0008	.0005	5.383	.0010	1.679	.0011	.0000	.0000	.0003
#2	.0014	.0016	5.396	.0008	1.673	.0011	-.0012	.0001	.0004
#3	.0004	.0030	5.386	.0002	1.678	.0011	-.0005	.0000	.0004

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1709.5**	**3793.0**	**30798.**	**6142.6**
Stddev	4.8	6.7	20.	19.0
%RSD	.28146	.17770	.06548	.30968
#1	1704.0	3789.5	30775.	6135.2
#2	1712.1	3788.7	30807.	6128.4
#3	1712.5	3800.7	30812.	6164.2

Zoom In Zoom Out

Sample Name: MP31557-D1 Acquired: 1/27/2017 14:14:14 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0002**	**.0133**	**.0072**	**.0176**	**.0000**	**85.37**	**-.0002**	**-.0003**	**.0002**
Stddev	.0002	.0001	.0006	.0002	.000	.07	.0001	.0001	.0003
%RSD	115.7	1.123	8.968	1.237	227.4	.0831	24.84	32.10	157.1
#1	-.0003	.0132	.0070	.0179	-.0001	85.32	-.0003	-.0003	.0004
#2	.0001	.0135	.0067	.0174	.0000	85.35	-.0002	-.0002	.0002
#3	-.0004	.0132	.0080	.0176	.0000	85.45	-.0002	-.0003	-.0001

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0007**	**7.172**	**1.471**	**9.587**	**.0281**	**.0105**	**51.50**	**-.0003**	**-.0016**
Stddev	.0002	.007	.019	.021	.0002	.0002	.14	.0001	.0009
%RSD	22.68	.0932	1.293	.2176	.5485	2.215	.2622	37.02	56.04
#1	.0009	7.174	1.452	9.585	.0280	.0105	51.60	-.0002	-.0016
#2	.0006	7.165	1.490	9.568	.0280	.0108	51.55	-.0005	-.0024
#3	.0007	7.178	1.470	9.609	.0283	.0103	51.35	-.0003	-.0007

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0021**	**.0016**	**5.377**	**.0008**	**1.654**	**.0010**	**.0003**	**.0001**	**.0002**
Stddev	.0012	.0003	.012	.0004	.005	.0000	.0015	.0001	.0001
%RSD	56.73	18.95	.2264	56.88	.2985	3.340	510.0	76.71	38.95
#1	.0012	.0016	5.363	.0007	1.660	.0010	.0019	.0001	.0001
#2	.0017	.0014	5.387	.0012	1.652	.0010	.0000	.0002	.0002
#3	.0034	.0020	5.379	.0003	1.651	.0010	-.0010	.0000	.0001

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1707.5**	**3788.6**	**30933.**	**6213.3**
Stddev	3.6	5.1	29.	22.0
%RSD	.20829	.13363	.09456	.35466
#1	1704.4	3794.4	30924.	6219.7
#2	1706.8	3786.4	30966.	6231.4
#3	1711.4	3785.1	30909.	6188.8

Zoom In Zoom Out

Sample Name: MP31557-SD1 Acquired: 1/27/2017 14:18:45 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0001**	**.0355**	**.0064**	**.0177**	**-.0002**	**87.74**	**-.0007**	**-.0006**	**.0009**
Stddev	.0005	.0480	.0018	.0011	.0002	.08	.0001	.0004	.0018
%RSD	563.2	135.2	27.93	6.053	90.61	.0901	14.47	74.61	215.2
#1	-.0003	-.0195	.0045	.0173	.0000	87.65	-.0006	-.0004	.0000
#2	.0000	.0573	.0067	.0168	-.0004	87.76	-.0008	-.0011	-.0004
#3	.0006	.0687	.0080	.0189	-.0003	87.80	-.0007	-.0003	.0030

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0012**	**7.299**	**1.400**	**9.991**	**.0292**	**.0093**	**51.53**	**-.0002**	**-.0014**
Stddev	.0009	.027	.110	.128	.0002	.0005	.13	.0008	.0026
%RSD	77.36	.3639	7.840	1.284	.7345	5.074	.2511	411.2	179.9
#1	.0002	7.286	1.276	10.03	.0292	.0098	51.54	.0007	-.0043
#2	.0015	7.281	1.441	10.09	.0290	.0088	51.66	-.0005	.0007
#3	.0020	7.330	1.484	9.847	.0294	.0094	51.40	-.0008	-.0007

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0058**	**-.0002**	**5.320**	**.0021**	**1.672**	**.0025**	**.0017**	**-.0002**	**.0511**
Stddev	.0017	.0009	.013	.0005	.005	.0004	.0084	.0005	.0003
%RSD	29.63	411.8	.2442	23.52	.3105	16.72	494.2	343.6	.6079
#1	.0049	.0007	5.333	.0027	1.674	.0027	-.0014	-.0003	.0514
#2	.0078	-.0010	5.320	.0019	1.676	.0029	-.0047	-.0006	.0508
#3	.0047	-.0003	5.307	.0018	1.666	.0021	.0112	.0004	.0511

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1822.9**	**4050.9**	**32178.**	**6480.9**
Stddev	3.3	14.3	90.	10.6
%RSD	.18043	.35208	.27992	.16280
#1	1820.8	4040.9	32214.	6493.0
#2	1821.2	4044.5	32245.	6476.3
#3	1826.7	4067.2	32076.	6473.5

Zoom In Zoom Out

Sample Name: MP31557-PS1 Acquired: 1/27/2017 14:23:15 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0485**	**2.819**	**.1172**	**.2996**	**.0554**	**87.40**	**.0533**	**.0535**	**.0551**
Stddev	.0003	.020	.0015	.0007	.0002	.13	.0000	.0002	.0003
%RSD	.6699	.7034	1.303	.2195	.3333	.1480	.0887	.2838	.5143
#1	.0484	2.796	.1155	.2988	.0553	87.27	.0533	.0533	.0548
#2	.0488	2.829	.1185	.2998	.0554	87.39	.0532	.0536	.0553
#3	.0482	2.831	.1177	.3001	.0556	87.53	.0533	.0535	.0550

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.1099**	**10.28**	**12.09**	**14.73**	**.0822**	**.1182**	**59.69**	**.1054**	**.0508**
Stddev	.0007	.01	.03	.03	.0002	.0004	.11	.0006	.0009
%RSD	.6148	.0701	.2619	.1873	.2135	.3045	.1767	.5510	1.737
#1	.1102	10.28	12.07	14.70	.0821	.1181	59.62	.1049	.0518
#2	.1103	10.29	12.07	14.72	.0823	.1179	59.64	.1055	.0501
#3	.1091	10.28	12.12	14.76	.0820	.1186	59.81	.1060	.0504

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.1150**	**.1030**	**5.113**	**.0518**	**1.626**	**.1087**	**.1009**	**.0521**	**.2753**
Stddev	.0010	.0009	.003	.0004	.002	.0002	.0010	.0001	.0003
%RSD	.8994	.8952	.0534	.7304	.0937	.1482	1.036	.2781	.1196
#1	.1147	.1041	5.112	.0519	1.627	.1088	.1012	.0522	.2753
#2	.1142	.1026	5.111	.0521	1.624	.1086	.1017	.0522	.2750
#3	.1162	.1024	5.116	.0514	1.625	.1088	.0997	.0520	.2757

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1746.6**	**3923.9**	**31388.**	**6251.1**
Stddev	4.4	7.4	52.	11.0
%RSD	.25094	.18771	.16578	.17518
#1	1750.7	3932.2	31338.	6260.5
#2	1742.0	3918.4	31385.	6253.7
#3	1747.2	3920.9	31442.	6239.0

Zoom In Zoom Out

Sample Name: MP31557-S1 Acquired: 1/27/2017 14:27:35 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0486**	**30.79**	**2.111**	**2.205**	**.0555**	**112.6**	**.0516**	**.5216**	**.2135**
Stddev	.0009	.04	.006	.006	.0003	.6	.0000	.0010	.0014
%RSD	1.776	.1293	.2714	.2867	.5463	.5159	.0713	.1973	.6567
#1	.0482	30.78	2.106	2.200	.0551	112.3	.0516	.5217	.2121
#2	.0496	30.84	2.117	2.203	.0556	113.3	.0515	.5206	.2149
#3	.0480	30.77	2.112	2.212	.0557	112.3	.0516	.5226	.2134

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.2747**	**36.73**	**29.72**	**37.02**	**.5630**	**.5625**	**79.18**	**.5241**	**.5110**
Stddev	.0025	.18	.10	.29	.0028	.0007	.26	.0020	.0003
%RSD	.9033	.4918	.3324	.7747	.5032	.1171	.3322	.3735	.0518
#1	.2720	36.62	29.61	36.94	.5599	.5619	78.89	.5220	.5109
#2	.2769	36.94	29.76	37.35	.5654	.5624	79.27	.5243	.5109
#3	.2752	36.63	29.80	36.79	.5638	.5632	79.39	.5259	.5113

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.5340**	**2.070**	**5.411**	**.5527**	**2.193**	**.5513**	**2.050**	**.5055**	**.5123**
Stddev	.0007	.006	.009	.0018	.004	.0046	.007	.0020	.0024
%RSD	.1304	.2766	.1720	.3283	.1661	.8355	.3298	.3914	.4666
#1	.5341	2.064	5.407	.5536	2.189	.5460	2.042	.5035	.5098
#2	.5333	2.073	5.404	.5506	2.195	.5543	2.052	.5075	.5126
#3	.5347	2.074	5.421	.5539	2.195	.5535	2.055	.5056	.5146

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1658.2**	**3791.1**	**30495.**	**6075.2**
Stddev	3.3	7.5	190.	37.3
%RSD	.19805	.19668	.62289	.61441
#1	1660.9	3798.5	30659.	6094.9
#2	1654.6	3791.0	30287.	6032.1
#3	1659.2	3783.6	30538.	6098.5

Zoom In Zoom Out

Sample Name: MP31557-S2 Acquired: 1/27/2017 14:31:50 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0478**	**29.96**	**2.059**	**2.170**	**.0540**	**109.7**	**.0504**	**.5081**	**.2060**
Stddev	.0006	.13	.002	.006	.0004	.5	.0001	.0008	.0011
%RSD	1.194	.4446	.0806	.2998	.6634	.4763	.2069	.1515	.5249
#1	.0480	29.94	2.057	2.163	.0537	109.4	.0505	.5086	.2065
#2	.0482	30.11	2.060	2.176	.0544	110.3	.0504	.5072	.2068
#3	.0471	29.84	2.060	2.170	.0539	109.3	.0503	.5085	.2048

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.2670**	**35.73**	**28.99**	**35.86**	**.5480**	**.5514**	**77.58**	**.5107**	**.4977**
Stddev	.0012	.16	.14	.26	.0003	.0021	.32	.0007	.0014
%RSD	.4557	.4495	.4665	.7214	.0536	.3803	.4140	.1351	.2803
#1	.2672	35.71	28.86	35.81	.5478	.5490	77.25	.5110	.4976
#2	.2657	35.90	29.13	36.14	.5483	.5524	77.89	.5099	.4964
#3	.2680	35.58	28.96	35.63	.5478	.5527	77.60	.5111	.4992

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.5187**	**2.022**	**5.303**	**.5392**	**2.148**	**.5348**	**2.002**	**.4913**	**.4992**
Stddev	.0024	.006	.012	.0016	.006	.0014	.003	.0015	.0019
%RSD	.4568	.2975	.2196	.2901	.2993	.2627	.1517	.2956	.3773
#1	.5182	2.017	5.290	.5408	2.142	.5361	2.000	.4911	.4995
#2	.5166	2.020	5.306	.5391	2.155	.5352	2.001	.4928	.4972
#3	.5213	2.028	5.312	.5377	2.148	.5333	2.006	.4899	.5009

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1690.0**	**3852.0**	**31114.**	**6261.3**
Stddev	2.8	9.4	64.	47.6
%RSD	.16785	.24405	.20451	.76050
#1	1693.2	3862.0	31071.	6273.9
#2	1689.1	3843.3	31187.	6208.6
#3	1687.7	3850.9	31084.	6301.2

Zoom In Zoom Out

Sample Name: FA39850-38T Acquired: 1/27/2017 14:36:04 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0028**	**131.5**	**.1332**	F **8.630**	**.0132**	**45.58**	**.0039**	**.1411**	**.2898**
Stddev	.0007	1.0	.0019	.185	.0002	.40	.0002	.0003	.0048
%RSD	26.15	.7563	1.414	2.141	1.256	.8798	5.518	.2334	1.641
#1	.0027	130.3	.1315	8.432	.0130	45.21	.0042	.1410	.2953
#2	.0021	132.0	.1352	8.799	.0134	45.54	.0039	.1414	.2871
#3	.0035	132.1	.1328	8.658	.0131	46.01	.0037	.1408	.2871

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.6639**	**153.8**	**16.97**	**18.47**	**2.292**	**.0396**	**3.377**	**.3417**	**5.208**
Stddev	.0113	1.3	.14	.19	.027	.0003	.026	.0006	.010
%RSD	1.708	.8291	.8390	1.030	1.170	.7223	.7725	.1795	.1886
#1	.6770	152.4	16.81	18.28	2.323	.0393	3.348	.3411	5.202
#2	.6568	154.2	17.05	18.48	2.280	.0399	3.389	.3416	5.202
#3	.6579	154.8	17.06	18.66	2.274	.0396	3.396	.3424	5.219

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0178**	**.0053**	**3.124**	**.1791**	**1.119**	**3.325**	**.0004**	**.3816**	**4.252**
Stddev	.0008	.0022	.013	.0010	.008	.043	.0038	.0054	.010
%RSD	4.667	41.48	.4025	.5737	.7098	1.281	900.4	1.425	.2379
#1	.0188	.0059	3.134	.1786	1.110	3.374	.0043	.3877	4.258
#2	.0174	.0029	3.128	.1784	1.124	3.297	.0003	.3796	4.240
#3	.0172	.0072	3.110	.1803	1.123	3.303	-.0033	.3774	4.257

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1760.2**	**4579.5**	**36168.**	**7230.8**
Stddev	1.5	13.9	377.	45.6
%RSD	.08607	.30266	1.0426	.63084
#1	1758.8	4563.7	35733.	7279.5
#2	1760.0	4585.1	36370.	7223.9
#3	1761.8	4589.7	36401.	7189.1

Zoom In Zoom Out

Sample Name: FA40645-10 Acquired: 1/27/2017 14:40:34 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0000**	**.0263**	**.0358**	**.0118**	**.0000**	**80.90**	**-.0001**	**-.0001**	**.0007**
Stddev	.000	.0021	.0004	.0002	.000	.22	.0001	.0000	.0002
%RSD	4689.	8.144	1.110	1.841	21.64	.2720	65.25	24.20	28.39
#1	.0003	.0287	.0362	.0120	.0000	81.15	-.0002	-.0002	.0005
#2	-.0002	.0248	.0354	.0117	.0000	80.81	-.0001	-.0001	.0009
#3	-.0001	.0253	.0358	.0116	.0000	80.74	-.0001	-.0002	.0006

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**-.0005**	**1.097**	**2.047**	**2.346**	**.0204**	**.0008**	**18.73**	**-.0001**	**-.0002**
Stddev	.0001	.001	.015	.015	.0000	.0002	.01	.0002	.0007
%RSD	22.42	.0527	.7164	.6233	.2081	19.26	.0336	130.4	273.6
#1	-.0006	1.097	2.053	2.349	.0204	.0010	18.73	-.0002	.0003
#2	-.0004	1.098	2.057	2.358	.0204	.0007	18.74	.0001	-.0010
#3	-.0005	1.096	2.030	2.330	.0204	.0008	18.72	-.0002	-.0001

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0019**	**.0015**	**2.636**	**.0007**	**.5166**	**.0014**	**.0000**	**.0006**	**.0014**
Stddev	.0004	.0004	.001	.0004	.0005	.0001	.001	.0002	.0001
%RSD	19.06	25.68	.0275	57.83	.0954	5.828	6071.	32.06	4.145
#1	.0016	.0011	2.636	.0003	.5162	.0015	-.0012	.0008	.0013
#2	.0023	.0018	2.637	.0008	.5165	.0013	.0010	.0008	.0013
#3	.0020	.0015	2.636	.0012	.5172	.0014	.0002	.0004	.0014

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1776.3**	**3973.7**	**31614.**	**6230.8**
Stddev	3.9	9.0	120.	30.9
%RSD	.21813	.22661	.37942	.49598
#1	1780.4	3984.0	31524.	6198.2
#2	1775.7	3968.9	31750.	6234.3
#3	1772.7	3968.0	31568.	6259.7

Zoom In Zoom Out

Sample Name: FA40683-1 Acquired: 1/27/2017 14:45:06 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0002**	**.0807**	**-.0019**	**.0199**	**.0000**	**134.2**	**-.0001**	**-.0003**	**.0021**
Stddev	.0002	.0032	.0003	.0000	.000	.6	.0000	.0001	.0001
%RSD	93.38	4.017	15.02	.2248	144.3	.4394	23.22	21.50	5.708
#1	.0002	.0826	-.0016	.0199	.0000	133.8	-.0001	-.0003	.0022
#2	.0000	.0825	-.0020	.0199	-.0001	133.9	-.0001	-.0004	.0020
#3	.0003	.0769	-.0022	.0200	-.0001	134.9	-.0001	-.0003	.0021

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**-.0003**	**.5419**	**2.063**	**4.488**	**.0287**	**.0000**	**39.79**	**-.0004**	**.0242**
Stddev	.0002	.0016	.014	.020	.0001	.0001	.08	.0000	.0003
%RSD	65.06	.2949	.6782	.4480	.3063	341.9	.1975	8.022	1.199
#1	-.0002	.5404	2.047	4.511	.0286	.0000	39.75	-.0004	.0239
#2	-.0004	.5435	2.073	4.481	.0287	.0001	39.73	-.0004	.0242
#3	-.0001	.5418	2.068	4.472	.0288	-.0001	39.88	-.0004	.0244

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0012**	**.0016**	**12.35**	**.0007**	**.9757**	**.0031**	**-.0006**	**.0011**	**.1004**
Stddev	.0010	.0009	.02	.0003	.0020	.0002	.0014	.0003	.0002
%RSD	81.06	59.50	.1310	40.34	.2011	6.684	220.3	23.53	.1839
#1	.0003	.0017	12.34	.0006	.9758	.0032	-.0008	.0008	.1004
#2	.0023	.0024	12.35	.0011	.9738	.0033	-.0019	.0011	.1006
#3	.0010	.0006	12.37	.0006	.9777	.0029	.0009	.0013	.1003

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1748.2**	**3909.3**	**31453.**	**6199.0**
Stddev	4.2	4.0	90.	22.7
%RSD	.23962	.10330	.28458	.36616
#1	1753.0	3911.3	31406.	6217.5
#2	1745.4	3904.6	31397.	6205.8
#3	1746.2	3911.9	31556.	6173.7

Zoom In Zoom Out

Sample Name: FA40683-2 Acquired: 1/27/2017 14:49:36 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0000**	**.1780**	**-.0007**	**.0311**	**.0000**	**126.4**	**-.0001**	**-.0001**	**.0019**
Stddev	.000	.0147	.0002	.0004	.000	.2	.0001	.0001	.0001
%RSD	813.6	8.264	21.70	1.203	21.19	.1300	41.67	47.92	5.321
#1	.0001	.1669	-.0006	.0314	.0000	126.5	-.0002	-.0002	.0018
#2	-.0002	.1724	-.0006	.0313	.0000	126.2	-.0002	-.0001	.0020
#3	.0001	.1947	-.0009	.0307	-.0001	126.4	-.0001	-.0001	.0019

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0003**	**1.155**	**5.471**	**6.713**	**.0253**	**-.0001**	F **82.13**	**.0000**	**-.0001**
Stddev	.0003	.011	.019	.025	.0002	.0002	.01	.000	.0012
%RSD	104.1	.9264	.3483	.3801	.6233	210.0	.0145	275.5	2269.
#1	.0002	1.164	5.492	6.684	.0255	-.0001	82.12	.0000	-.0014
#2	.0000	1.158	5.457	6.723	.0253	.0001	82.14	-.0001	.0006
#3	.0005	1.144	5.463	6.732	.0251	-.0003	82.12	.0000	.0006

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0017**	**.0004**	**2.013**	**.0011**	**.6692**	**.0048**	**.0005**	**.0043**	**.0043**
Stddev	.0008	.0012	.002	.0001	.0013	.0004	.0002	.0001	.0000
%RSD	47.58	277.9	.1048	9.223	.1938	9.072	54.22	1.728	.2045
#1	.0008	.0004	2.012	.0012	.6702	.0054	.0002	.0043	.0043
#2	.0023	.0017	2.012	.0010	.6697	.0047	.0006	.0042	.0043
#3	.0020	-.0008	2.015	.0010	.6677	.0045	.0006	.0042	.0043

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1729.7**	**3871.4**	**31450.**	**6189.1**
Stddev	3.6	3.9	64.	7.6
%RSD	.20733	.10122	.20478	.12229
#1	1726.7	3868.7	31423.	6180.7
#2	1728.8	3869.7	31523.	6191.2
#3	1733.7	3875.9	31403.	6195.4

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/27/2017 14:54:07 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2605**	**39.82**	**1.940**	**2.032**	**2.007**	**39.69**	**1.979**	**1.986**	**2.018**
Stddev	.0015	.16	.006	.002	.007	.25	.004	.003	.007
%RSD	.5722	.4073	.3238	.1174	.3370	.6254	.2221	.1676	.3487
#1	.2621	39.78	1.934	2.034	2.005	39.49	1.974	1.982	2.011
#2	.2591	39.69	1.946	2.030	2.002	39.61	1.983	1.989	2.017
#3	.2603	40.00	1.941	2.033	2.015	39.97	1.980	1.986	2.025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.967**	**40.33**	**38.73**	**39.48**	**2.015**	**2.049**	**39.03**	**1.959**	**1.967**
Stddev	.006	.24	.10	.37	.001	.003	.03	.004	.007
%RSD	.2858	.5979	.2552	.9461	.0284	.1532	.0792	.1780	.3818
#1	1.963	40.19	38.64	39.19	2.015	2.046	39.04	1.956	1.960
#2	1.965	40.19	38.71	39.36	2.014	2.052	39.00	1.963	1.975
#3	1.973	40.61	38.84	39.90	2.015	2.049	39.06	1.959	1.965
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.940**	**1.962**	**2.499**	**2.086**	**2.048**	**2.052**	**1.957**	**2.054**	**1.974**
Stddev	.002	.003	.002	.003	.003	.008	.012	.003	.008
%RSD	.0907	.1552	.0625	.1550	.1618	.4005	.6044	.1326	.4232
#1	1.938	1.960	2.499	2.082	2.046	2.044	1.946	2.053	1.965
#2	1.939	1.960	2.500	2.087	2.045	2.051	1.970	2.052	1.982
#3	1.942	1.965	2.497	2.088	2.051	2.061	1.957	2.057	1.976
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/27/2017 14:54:07 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1703.8**	**3934.9**	**31226.**	**6168.4**
Stddev	3.5	5.4	87.	67.5
%RSD	.20325	.13783	.28004	1.0937
#1	1707.2	3941.1	31297.	6216.5
#2	1700.3	3931.3	31253.	6197.5
#3	1703.8	3932.2	31129.	6091.3

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/27/2017 14:58:19 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**.0047**	**-.0001**	**.0002**	**.0001**	**.0005**	**.0000**	**.0000**	**.0001**
Stddev	.000	.0041	.0006	.0001	.0000	.0010	.0001	.000	.0002
%RSD	491.8	86.14	651.6	42.56	19.49	182.5	185.5	716.0	332.3
#1	-.0002	.0046	.0004	.0003	.0001	-.0004	.0001	.0000	.0003
#2	-.0001	.0088	-.0008	.0001	.0001	.0005	.0001	.0000	-.0001
#3	.0001	.0007	.0001	.0003	.0001	.0016	.0000	.0000	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0010**	**.0066**	**.0073**	**.0173**	**.0001**	F **.0019**	**.0391**	**.0002**	**.0000**
Stddev	.0001	.0020	.0200	.0181	.0000	.0005	.0077	.0001	.0003
%RSD	8.940	29.68	272.9	104.6	15.50	24.76	19.81	59.23	623.2
#1	-.0011	.0076	-.0062	.0175	.0001	.0023	.0367	.0002	-.0003
#2	-.0009	.0078	-.0021	-.0009	.0002	.0021	.0477	.0001	.0002
#3	-.0011	.0043	.0303	.0352	.0001	.0014	.0328	.0002	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.0023**	**.0012**	**-.0001**	**.0008**	**.0002**	**.0003**	**.0007**	**.0002**	**.0001**
Stddev	.0012	.0008	.0002	.0001	.0001	.0001	.0005	.0003	.0001
%RSD	50.08	66.05	254.0	10.35	41.68	58.03	80.05	125.2	98.22
#1	.0027	.0011	.0002	.0008	.0001	.0001	.0004	.0000	.0000
#2	.0033	.0019	-.0003	.0008	.0002	.0004	.0013	.0005	.0001
#3	.0010	.0004	-.0001	.0007	.0003	.0003	.0003	.0001	.0000
Check ?	Chk Fail	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.0020								
Low Limit	-.0020								

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/27/2017 14:58:19 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1818.9**	**4138.0**	**32139.**	**6280.5**
Stddev	2.4	.6	58.	10.6
%RSD	.13220	.01383	.17985	.16868
#1	1816.1	4137.4	32101.	6270.7
#2	1820.1	4138.0	32112.	6279.0
#3	1820.4	4138.6	32206.	6291.7

Zoom In Zoom Out

Sample Name: FA40683-3 Acquired: 1/27/2017 15:02:53 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0000**	**.0234**	**-.0005**	**.0336**	**-.0001**	**139.0**	**-.0001**	**-.0002**	**.0006**
Stddev	.0001	.0027	.0005	.0002	.0001	.3	.0000	.0000	.0001
%RSD	1580.	11.45	105.9	.6621	100.7	.1896	13.30	15.77	10.47
#1	-.0001	.0211	-.0010	.0338	.0000	138.8	-.0001	-.0002	.0006
#2	.0001	.0264	.0001	.0337	.0000	139.3	-.0002	-.0001	.0006
#3	.0001	.0229	-.0006	.0333	-.0001	138.8	-.0001	-.0002	.0005

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**-.0002**	**1.612**	**6.213**	**9.307**	**.0358**	**.0011**	F **83.44**	**-.0001**	**-.0006**
Stddev	.0002	.002	.022	.061	.0000	.0002	.27	.0001	.0004
%RSD	96.46	.1137	.3472	.6598	.0539	15.11	.3203	38.56	61.89
#1	-.0005	1.613	6.203	9.239	.0358	.0012	83.71	-.0001	-.0002
#2	-.0001	1.611	6.238	9.357	.0358	.0011	83.17	-.0002	-.0009
#3	-.0001	1.610	6.199	9.325	.0358	.0009	83.43	-.0001	-.0007

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0016**	**.0011**	**2.844**	**.0010**	**.8029**	**.0013**	**-.0021**	**.0015**	**.0001**
Stddev	.0005	.0001	.011	.0002	.0022	.0001	.0006	.0001	.0000
%RSD	27.44	5.991	.3736	17.57	.2710	9.221	29.93	6.066	33.28
#1	.0011	.0011	2.832	.0008	.8054	.0012	-.0019	.0014	.0001
#2	.0019	.0012	2.853	.0011	.8015	.0014	-.0028	.0015	.0001
#3	.0019	.0011	2.847	.0011	.8018	.0012	-.0016	.0015	.0002

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1725.5**	**3871.8**	**31455.**	**6172.1**
Stddev	2.8	17.5	41.	21.1
%RSD	.16118	.45165	.13058	.34229
#1	1727.5	3891.9	31420.	6175.2
#2	1726.7	3860.1	31500.	6149.6
#3	1722.3	3863.5	31445.	6191.5

Zoom In Zoom Out

Sample Name: FA40683-4 Acquired: 1/27/2017 15:07:22 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0001**	**.2827**	**-.0007**	**.0372**	**-.0001**	**161.5**	**-.0001**	**-.0003**	**.0010**
Stddev	.0002	.0124	.0010	.0001	.0000	.7	.0000	.0001	.0003
%RSD	330.7	4.370	142.4	.3168	53.54	.4488	18.28	43.24	30.50
#1	.0001	.2833	.0004	.0370	-.0001	161.7	-.0001	-.0003	.0007
#2	.0002	.2701	-.0011	.0371	.0000	162.1	-.0001	-.0001	.0013
#3	-.0001	.2948	-.0015	.0373	-.0001	160.7	-.0001	-.0003	.0009

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0002**	**2.133**	**7.136**	**10.94**	**.0565**	**.0006**	**F 128.4**	**.0000**	**-.0001**
Stddev	.0003	.017	.051	.06	.0004	.0001	.7	.000	.0002
%RSD	145.5	.7836	.7117	.5122	.6764	20.12	.5737	380.0	356.7
#1	.0004	2.153	7.140	10.98	.0569	.0005	128.3	.0000	.0001
#2	.0005	2.126	7.185	10.95	.0565	.0006	129.2	.0001	.0000
#3	-.0002	2.122	7.084	10.87	.0561	.0008	127.7	-.0002	-.0002

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0019**	**.0028**	**2.851**	**.0010**	**.9520**	**.0091**	**-.0010**	**.0019**	**.0015**
Stddev	.0013	.0002	.009	.0007	.0036	.0010	.0009	.0003	.0001
%RSD	69.16	6.660	.3289	65.67	.3739	10.59	89.23	16.86	4.564
#1	.0018	.0030	2.850	.0003	.9523	.0083	-.0014	.0021	.0015
#2	.0033	.0026	2.841	.0015	.9554	.0102	-.0016	.0016	.0015
#3	.0007	.0028	2.860	.0013	.9483	.0087	.0000	.0021	.0014

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1702.6**	**3822.4**	**30945.**	**5992.0**
Stddev	3.0	8.1	85.	21.3
%RSD	.17630	.21284	.27319	.35474
#1	1700.4	3813.0	30917.	5975.8
#2	1706.0	3827.9	30879.	5984.3
#3	1701.4	3826.1	31041.	6016.1

Zoom In Zoom Out

Sample Name: FA40683-5 Acquired: 1/27/2017 15:11:51 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0001**	**.1037**	**-.0005**	**.0378**	**.0001**	**129.8**	**-.0001**	**.0004**	**.0013**
Stddev	.0001	.0043	.0008	.0003	.0000	.4	.0000	.0001	.0002
%RSD	53.90	4.175	170.4	.7801	52.47	.3044	28.99	15.09	14.39
#1	-.0001	.1070	.0004	.0379	.0000	130.0	-.0001	.0004	.0011
#2	-.0002	.1054	-.0007	.0379	.0001	129.3	-.0002	.0004	.0013
#3	-.0001	.0988	-.0011	.0374	.0001	130.0	-.0001	.0003	.0015

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**-.0005**	**1.419**	**9.924**	**12.54**	**.1146**	**-.0001**	**45.24**	**.0010**	**.0001**
Stddev	.0005	.001	.029	.04	.0001	.0001	.07	.0000	.0005
%RSD	100.7	.0370	.2889	.3498	.0512	89.01	.1632	4.978	347.6
#1	-.0005	1.418	9.921	12.55	.1147	-.0001	45.33	.0010	.0001
#2	-.0009	1.419	9.896	12.49	.1146	-.0001	45.19	.0010	-.0003
#3	.0000	1.420	9.953	12.57	.1145	.0000	45.21	.0009	.0006

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0018**	**.0012**	**3.604**	**.0008**	**.3284**	**.0020**	**-.0013**	**.0016**	**.0008**
Stddev	.0010	.0028	.004	.0003	.0007	.0000	.0011	.0001	.0001
%RSD	54.88	227.5	.1039	37.25	.2016	.9852	78.96	5.441	13.00
#1	.0029	.0033	3.609	.0010	.3287	.0020	-.0002	.0017	.0008
#2	.0017	.0024	3.603	.0005	.3277	.0019	-.0015	.0016	.0007
#3	.0009	-.0020	3.601	.0009	.3289	.0020	-.0023	.0015	.0009

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1739.1**	**3977.5**	**32044.**	**6225.5**
Stddev	1.0	3.5	67.	4.6
%RSD	.05491	.08862	.20783	.07333
#1	1738.1	3973.6	32052.	6227.3
#2	1739.9	3978.4	32105.	6228.9
#3	1739.4	3980.4	31973.	6220.4

Zoom In Zoom Out

Sample Name: FA40683-6 Acquired: 1/27/2017 15:16:21 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0003**	**.3811**	**-.0016**	**.0274**	**.0000**	**67.47**	**-.0001**	**.0000**	**.0017**
Stddev	.0001	.0059	.0002	.0002	.0000	.03	.0000	.000	.0004
%RSD	40.10	1.558	14.12	.7437	100.1	.0495	15.42	832.9	21.94
#1	-.0002	.3877	-.0015	.0272	.0000	67.45	-.0001	.0000	.0019
#2	-.0003	.3796	-.0019	.0275	.0000	67.45	-.0001	.0000	.0013
#3	-.0005	.3762	-.0015	.0275	.0000	67.51	-.0001	-.0001	.0019

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**-.0005**	**.1419**	**2.238**	**9.988**	**.0298**	**-.0003**	**57.62**	**.0004**	**.0000**
Stddev	.0003	.0042	.018	.013	.0001	.0002	.25	.0001	.000
%RSD	61.73	2.983	.8131	.1251	.3203	67.82	.4353	22.69	3083.
#1	-.0009	.1385	2.250	9.992	.0297	-.0004	57.49	.0003	.0003
#2	-.0003	.1405	2.217	9.997	.0298	-.0004	57.91	.0003	.0000
#3	-.0004	.1466	2.247	9.974	.0299	-.0001	57.45	.0004	-.0003

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0017**	**.0029**	**1.832**	**.0006**	**.2570**	**.0040**	**.0002**	**.0028**	**.0085**
Stddev	.0003	.0014	.006	.0002	.0013	.0002	.0004	.0003	.0000
%RSD	16.79	48.21	.3421	34.83	.4971	4.919	231.8	9.316	.4831
#1	.0020	.0045	1.827	.0009	.2563	.0041	.0005	.0025	.0085
#2	.0016	.0024	1.830	.0005	.2585	.0041	.0004	.0028	.0085
#3	.0015	.0018	1.839	.0006	.2562	.0038	-.0003	.0030	.0084

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1759.2**	**3987.0**	**32083.**	**6205.9**
Stddev	2.5	6.5	88.	21.9
%RSD	.14446	.16207	.27572	.35350
#1	1757.7	3993.3	31984.	6184.2
#2	1762.2	3980.4	32111.	6228.0
#3	1757.8	3987.3	32154.	6205.4

Zoom In Zoom Out

Sample Name: FA40683-7 Acquired: 1/27/2017 15:20:51 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0000**	**.9596**	**.0006**	**.0503**	**.0000**	**62.91**	**-.0001**	**.0000**	**.0020**
Stddev	.000	.0137	.0008	.0001	.000	.23	.0000	.0001	.0003
%RSD	235.6	1.427	147.2	.1322	601.2	.3631	31.88	283.2	14.38
#1	.0000	.9459	.0011	.0503	.0000	63.17	-.0002	.0000	.0023
#2	.0000	.9733	.0010	.0503	-.0001	62.84	-.0001	.0001	.0017
#3	.0000	.9594	-.0004	.0504	.0000	62.73	-.0001	.0000	.0020

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0002**	**.7472**	**5.661**	**10.14**	**.0077**	**.0000**	**F 139.8**	**.0008**	**.0000**
Stddev	.0000	.0026	.012	.13	.0000	.0002	.3	.0001	.0003
%RSD	15.39	.3487	.2032	1.305	.6180	1405.	.1973	9.178	3036.
#1	.0002	.7499	5.659	10.26	.0077	-.0001	139.7	.0008	-.0001
#2	.0002	.7469	5.673	10.16	.0078	-.0001	139.6	.0008	.0003
#3	.0002	.7447	5.650	9.996	.0077	.0002	140.1	.0009	-.0002

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0010**	**.0017**	**1.577**	**.0016**	**.3169**	**.0071**	**.0002**	**.0032**	**.0023**
Stddev	.0008	.0006	.004	.0002	.0012	.0002	.0012	.0001	.0001
%RSD	80.06	33.06	.2765	15.23	.3683	2.640	657.1	3.046	5.638
#1	.0006	.0013	1.574	.0013	.3159	.0073	.0005	.0032	.0022
#2	.0019	.0014	1.576	.0016	.3182	.0071	-.0011	.0031	.0022
#3	.0004	.0024	1.582	.0018	.3165	.0070	.0012	.0033	.0024

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1731.9**	**3932.3**	**31751.**	**6258.6**
Stddev	2.7	8.4	30.	49.7
%RSD	.15339	.21449	.09474	.79392
#1	1728.9	3926.7	31784.	6214.9
#2	1732.9	3942.0	31740.	6248.3
#3	1734.0	3928.1	31727.	6312.7

Zoom In Zoom Out

Sample Name: FA40683-8 Acquired: 1/27/2017 15:25:20 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0000**	**.0307**	**-.0007**	**.0363**	**-.0001**	**148.7**	**-.0001**	**-.0002**	**.0007**
Stddev	.000	.0050	.0014	.0001	.0001	1.5	.0001	.0000	.0001
%RSD	334.4	16.29	209.3	.3533	54.25	.9833	76.58	9.489	20.05
#1	.0001	.0343	-.0023	.0363	-.0001	150.3	.0000	-.0002	.0009
#2	-.0002	.0328	-.0002	.0365	-.0002	148.1	-.0002	-.0002	.0006
#3	.0000	.0250	.0005	.0362	-.0001	147.5	-.0001	-.0002	.0007

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0000**	**.7585**	**7.522**	**10.87**	**.0620**	**.0000**	**F 107.4**	**-.0001**	**.0003**
Stddev	.0002	.0092	.072	.16	.0002	.000	.6	.0000	.0004
%RSD	3482.	1.219	.9601	1.467	.3314	784.4	.5668	29.57	129.1
#1	-.0002	.7692	7.600	11.06	.0622	.0000	108.1	-.0001	-.0001
#2	.0001	.7532	7.458	10.77	.0618	.0001	107.1	-.0001	.0007
#3	.0001	.7532	7.509	10.79	.0619	-.0001	107.1	-.0001	.0002

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0017**	**.0019**	**2.060**	**.0006**	**.8748**	**.0013**	**-.0001**	**.0030**	**.0008**
Stddev	.0006	.0007	.013	.0008	.0051	.0001	.0016	.0002	.0001
%RSD	35.93	38.14	.6074	142.3	.5803	5.432	1106.	7.572	14.39
#1	.0024	.0025	2.073	.0008	.8806	.0012	.0011	.0033	.0006
#2	.0015	.0021	2.059	.0013	.8726	.0013	.0004	.0029	.0008
#3	.0012	.0011	2.048	-.0003	.8712	.0012	-.0019	.0028	.0009

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1704.5**	**3827.0**	**31152.**	**6116.6**
Stddev	5.9	22.4	84.	58.3
%RSD	.34847	.58651	.26832	.95294
#1	1697.9	3801.7	31150.	6049.3
#2	1709.4	3834.7	31069.	6149.9
#3	1706.4	3844.6	31236.	6150.5

Zoom In Zoom Out

Sample Name: FA40683-9 Acquired: 1/27/2017 15:29:50 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0001**	**.0279**	**.0012**	**.0357**	**-.0001**	**179.2**	**-.0002**	**-.0001**	**.0004**
Stddev	.0004	.0053	.0007	.0002	.0000	1.5	.0000	.0001	.0001
%RSD	417.4	18.81	59.86	.4203	28.56	.8301	15.49	89.76	15.63
#1	-.0006	.0319	.0006	.0359	-.0001	180.6	-.0002	-.0002	.0005
#2	.0001	.0299	.0020	.0356	-.0001	179.4	-.0002	-.0002	.0004
#3	.0002	.0220	.0010	.0357	-.0001	177.6	-.0002	.0000	.0004

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**-.0001**	**3.645**	**10.56**	**12.82**	**.1177**	**-.0001**	**34.64**	**.0002**	**.0087**
Stddev	.0004	.025	.01	.14	.0003	.0003	.11	.0001	.0010
%RSD	485.7	.6937	.0488	1.087	.2601	544.7	.3091	47.55	11.19
#1	.0004	3.674	10.56	12.96	.1176	-.0001	34.71	.0001	.0094
#2	-.0003	3.627	10.55	12.83	.1180	-.0003	34.69	.0002	.0090
#3	-.0003	3.636	10.56	12.68	.1174	.0002	34.52	.0002	.0076

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0013**	**.0026**	**5.800**	**.0005**	**.8209**	**.0011**	**.0006**	**.0074**	**.0007**
Stddev	.0013	.0017	.003	.0005	.0025	.0001	.0016	.0002	.0000
%RSD	96.74	66.15	.0471	95.13	.3073	7.020	252.1	2.224	3.029
#1	.0026	.0039	5.797	.0001	.8237	.0010	-.0005	.0074	.0007
#2	.0014	.0007	5.802	.0004	.8203	.0011	-.0001	.0072	.0007
#3	.0000	.0032	5.800	.0010	.8188	.0010	.0024	.0075	.0007

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1718.7**	**3865.5**	**31097.**	**6034.5**
Stddev	4.2	3.7	163.	63.9
%RSD	.24629	.09673	.52573	1.0589
#1	1713.8	3867.8	30965.	5969.5
#2	1721.5	3867.5	31045.	6037.0
#3	1720.8	3861.2	31280.	6097.2

Zoom In Zoom Out

Sample Name: FA40683-10 Acquired: 1/27/2017 15:34:18 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0000**	**.3162**	**.0031**	**.0076**	**.0000**	**37.92**	**-.0001**	**-.0001**	**.0015**
Stddev	.0002	.0084	.0014	.0001	.000	.11	.0001	.0001	.0001
%RSD	508.2	2.654	44.85	1.958	213.8	.2929	92.50	69.47	8.739
#1	.0003	.3142	.0018	.0078	.0000	37.84	.0000	-.0001	.0014
#2	.0000	.3091	.0045	.0076	.0000	37.87	-.0002	.0000	.0016
#3	-.0001	.3255	.0029	.0075	.0000	38.05	-.0001	-.0001	.0016

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**-.0001**	**.0329**	**1.910**	**5.188**	**.0051**	**-.0002**	**11.92**	**-.0001**	**.0001**
Stddev	.0001	.0012	.037	.051	.0001	.0001	.01	.0002	.0006
%RSD	90.90	3.733	1.947	.9776	1.214	59.67	.1082	213.2	623.7
#1	-.0001	.0344	1.897	5.166	.0051	-.0003	11.91	-.0003	.0007
#2	.0000	.0321	1.881	5.153	.0050	-.0001	11.93	-.0001	.0002
#3	.0000	.0324	1.952	5.246	.0052	-.0002	11.92	.0001	-.0006

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0015**	**.0009**	**2.735**	**.0008**	**.2647**	**.0036**	**.0006**	**.0016**	**.0046**
Stddev	.0011	.0013	.005	.0002	.0001	.0000	.0004	.0004	.0001
%RSD	70.75	141.5	.1988	25.45	.0252	1.230	76.92	24.05	1.668
#1	.0026	.0024	2.737	.0010	.2646	.0037	.0010	.0014	.0046
#2	.0005	-.0001	2.729	.0009	.2647	.0036	.0006	.0013	.0045
#3	.0013	.0004	2.740	.0006	.2648	.0036	.0001	.0020	.0046

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1764.5**	**3954.3**	**31520.**	**6206.0**
Stddev	1.0	6.8	61.	25.6
%RSD	.05932	.17132	.19209	.41212
#1	1765.3	3947.2	31453.	6226.1
#2	1764.8	3960.7	31537.	6214.8
#3	1763.3	3954.9	31571.	6177.2

Zoom In Zoom Out

Sample Name: FA40683-11 Acquired: 1/27/2017 15:38:49 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0002**	**.0388**	**-.0015**	**.0304**	**.0000**	**146.6**	**-.0001**	**-.0002**	**.0012**
Stddev	.0001	.0023	.0009	.0002	.000	.3	.0001	.0001	.0002
%RSD	51.15	6.027	56.86	.6333	114.6	.2068	52.71	40.91	13.52
#1	.0003	.0376	-.0023	.0306	-.0001	146.9	-.0001	-.0001	.0012
#2	.0002	.0373	-.0017	.0302	.0000	146.3	.0000	-.0003	.0014
#3	.0001	.0415	-.0006	.0302	.0000	146.7	-.0002	-.0003	.0011

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0000**	**.2683**	**4.948**	**7.773**	**.0168**	**-.0001**	**78.76**	**.0000**	**-.0011**
Stddev	.000	.0039	.027	.017	.0001	.0001	.42	.000	.0003
%RSD	204.9	1.454	.5442	.2124	.3484	84.74	.5373	378.1	23.08
#1	.0000	.2701	4.978	7.778	.0168	.0000	79.23	-.0002	-.0009
#2	-.0001	.2638	4.928	7.755	.0169	-.0003	78.40	.0001	-.0014
#3	.0000	.2709	4.937	7.787	.0169	-.0002	78.65	.0000	-.0012

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0016**	**.0023**	**2.775**	**.0008**	**.7731**	**.0015**	**-.0004**	**.0026**	**.0015**
Stddev	.0006	.0004	.011	.0001	.0051	.0002	.0005	.0001	.0000
%RSD	35.84	19.31	.3778	16.03	.6633	10.25	111.9	2.495	2.908
#1	.0023	.0026	2.776	.0008	.7786	.0017	-.0010	.0027	.0014
#2	.0013	.0024	2.764	.0009	.7685	.0016	-.0001	.0026	.0015
#3	.0013	.0018	2.785	.0007	.7721	.0014	-.0003	.0026	.0015

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1715.0**	**3833.6**	**31330.**	**6136.6**
Stddev	5.6	20.5	20.	6.1
%RSD	.32413	.53418	.06414	.09862
#1	1714.6	3822.7	31341.	6133.4
#2	1720.8	3857.2	31343.	6143.6
#3	1709.7	3820.9	31307.	6132.8

Zoom In Zoom Out

Sample Name: FA40683-12 Acquired: 1/27/2017 15:43:18 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0001**	**.0095**	**.0002**	**.0178**	**-.0001**	**141.9**	**-.0001**	**-.0001**	**.0004**
Stddev	.0001	.0024	.0013	.0002	.0001	.7	.0000	.0001	.0003
%RSD	90.97	25.63	546.3	.8504	123.0	.4921	15.32	45.51	73.40
#1	.0001	.0113	-.0012	.0179	-.0001	142.7	-.0002	-.0002	.0002
#2	.0000	.0068	.0011	.0179	-.0001	141.6	-.0001	-.0002	.0008
#3	.0000	.0105	.0008	.0177	.0000	141.4	-.0001	-.0001	.0003

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0002**	**.7181**	**6.488**	**15.46**	**.0167**	**.0008**	**F 88.36**	**.0000**	**-.0004**
Stddev	.0002	.0021	.004	.07	.0000	.0001	.30	.0001	.0004
%RSD	119.2	.2972	.0693	.4342	.0433	19.25	.3353	204.7	105.6
#1	.0000	.7174	6.487	15.52	.0167	.0009	88.61	.0001	-.0007
#2	.0001	.7165	6.484	15.39	.0167	.0007	88.03	.0001	-.0005
#3	.0004	.7205	6.493	15.48	.0167	.0006	88.44	-.0001	.0001

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0019**	**.0021**	**3.154**	**.0008**	**.7570**	**.0008**	**-.0003**	**.0053**	**.0007**
Stddev	.0005	.0009	.000	.0005	.0019	.0001	.0003	.0004	.0001
%RSD	28.55	42.34	.0100	63.04	.2576	7.115	112.7	7.600	11.27
#1	.0025	.0028	3.154	.0013	.7581	.0008	-.0006	.0048	.0008
#2	.0015	.0011	3.154	.0003	.7547	.0009	.0000	.0053	.0007
#3	.0017	.0024	3.153	.0007	.7580	.0008	-.0002	.0056	.0006

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1730.7**	**3890.9**	**31536.**	**6174.6**
Stddev	3.0	6.4	32.	43.9
%RSD	.17191	.16323	.10015	.71020
#1	1733.6	3897.6	31514.	6125.1
#2	1730.7	3884.9	31522.	6190.2
#3	1727.7	3890.2	31572.	6208.5

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/27/2017 15:47:48 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2567**	**39.52**	**1.892**	**1.997**	**1.976**	**38.94**	**1.936**	**1.947**	**1.997**
Stddev	.0001	.11	.003	.005	.007	.22	.003	.004	.006
%RSD	.0311	.2728	.1478	.2358	.3600	.5621	.1639	.1914	.2852
#1	.2567	39.58	1.890	2.002	1.982	39.11	1.936	1.943	1.995
#2	.2568	39.59	1.891	1.997	1.979	39.01	1.940	1.951	1.993
#3	.2566	39.40	1.896	1.993	1.968	38.69	1.933	1.947	2.004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.950**	**39.89**	**38.07**	**38.98**	**1.971**	**2.006**	**38.29**	**1.912**	**1.936**
Stddev	.003	.14	.15	.20	.008	.006	.07	.002	.005
%RSD	.1736	.3537	.3836	.5075	.4222	.2905	.1713	.1226	.2404
#1	1.954	39.93	38.09	39.00	1.972	2.000	38.35	1.911	1.932
#2	1.948	40.00	38.21	39.17	1.963	2.012	38.22	1.915	1.934
#3	1.949	39.73	37.92	38.78	1.979	2.007	38.29	1.911	1.941
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.893**	**1.916**	**2.438**	**2.045**	**2.012**	**2.028**	**1.924**	**2.014**	**1.922**
Stddev	.007	.005	.004	.007	.003	.006	.009	.007	.002
%RSD	.3940	.2630	.1533	.3321	.1532	.2834	.4895	.3268	.1178
#1	1.885	1.911	2.434	2.040	2.014	2.028	1.915	2.012	1.922
#2	1.897	1.921	2.441	2.053	2.013	2.022	1.923	2.008	1.923
#3	1.898	1.916	2.441	2.043	2.008	2.034	1.934	2.021	1.919
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/27/2017 15:47:48 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1723.5**	**4007.7**	**31521.**	**6167.8**
Stddev	8.2	11.8	72.	43.1
%RSD	.47762	.29535	.22965	.69821
#1	1730.9	4020.6	31508.	6139.4
#2	1725.1	4005.2	31599.	6146.6
#3	1714.6	3997.4	31456.	6217.3

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/27/2017 15:51:59 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**.0075**	**-.0005**	**.0000**	**.0002**	**.0069**	**.0001**	**.0000**	**.0002**
Stddev	.000	.0021	.0004	.0001	.0001	.0008	.0000	.000	.0001
%RSD	1491.	27.23	82.26	975.3	23.54	11.56	39.88	331.5	79.08
#1	-.0004	.0052	-.0002	.0001	.0003	.0061	.0001	-.0001	.0003
#2	.0002	.0089	-.0009	.0000	.0002	.0069	.0000	.0000	.0002
#3	.0001	.0085	-.0003	-.0001	.0002	.0077	.0001	.0000	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0005**	**.0116**	**.0226**	**.0052**	**.0002**	**F .0017**	**.0566**	**-.0001**	**.0001**
Stddev	.0002	.0017	.0169	.0218	.0000	.0005	.0071	.0001	.0003
%RSD	44.06	14.50	74.96	422.9	21.21	25.92	12.53	82.63	241.7
#1	-.0003	.0128	.0070	.0053	.0001	.0022	.0579	.0000	-.0002
#2	-.0007	.0123	.0406	-.0167	.0002	.0018	.0629	-.0001	.0002
#3	-.0006	.0097	.0201	.0269	.0002	.0013	.0489	-.0001	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**-.0003**	**.0003**	**.0004**	**.0002**	**.0002**	**.0014**	**.0000**	**.0001**
Stddev	.0001	.0015	.0003	.0002	.0001	.0002	.0024	.0001	.0001
%RSD	29.97	528.9	128.7	66.93	36.87	65.52	173.2	202.8	103.2
#1	.0003	-.0014	.0003	.0001	.0003	.0004	.0018	-.0001	.0002
#2	.0005	.0014	-.0001	.0004	.0002	.0002	.0036	.0001	.0000
#3	.0004	-.0008	.0006	.0006	.0002	.0001	-.0012	.0001	.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/27/2017 15:51:59 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1807.0**	**4094.1**	**32026.**	**6339.7**
Stddev	8.7	9.1	199.	19.8
%RSD	.48136	.22123	.62144	.31166
#1	1800.6	4088.2	31811.	6326.3
#2	1803.5	4089.5	32204.	6362.4
#3	1816.9	4104.5	32065.	6330.5

Zoom In Zoom Out

Sample Name: FA40683-13 Acquired: 1/27/2017 15:56:33 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0001**	**.8224**	**.0040**	**.0437**	**.0002**	**91.48**	**.0000**	**.0008**	**.0034**
Stddev	.0001	.0132	.0003	.0008	.0000	.82	.000	.0000	.0005
%RSD	90.74	1.610	6.925	1.894	21.13	.8951	324.5	6.150	14.58
#1	.0000	.8117	.0038	.0428	.0002	90.55	.0000	.0008	.0040
#2	-.0001	.8184	.0043	.0441	.0002	92.10	.0000	.0008	.0032
#3	-.0001	.8372	.0039	.0442	.0002	91.78	-.0001	.0007	.0031

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**-.0005**	**1.661**	**10.01**	**10.11**	**.0603**	**.0010**	**41.28**	**.0013**	**-.0005**
Stddev	.0001	.016	.12	.10	.0003	.0002	.50	.0000	.0005
%RSD	17.92	.9678	1.248	.9691	.5258	16.92	1.209	2.935	89.94
#1	-.0004	1.642	9.873	9.996	.0600	.0011	40.73	.0014	-.0001
#2	-.0006	1.671	10.12	10.16	.0605	.0010	41.70	.0013	-.0010
#3	-.0005	1.669	10.03	10.17	.0605	.0008	41.41	.0014	-.0005

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0010**	**.0014**	**2.936**	**.0014**	**.2293**	**.0098**	**-.0010**	**.0050**	**.0028**
Stddev	.0005	.0024	.005	.0005	.0031	.0003	.0018	.0001	.0000
%RSD	51.70	171.7	.1890	35.03	1.340	3.176	184.4	1.788	.8988
#1	.0007	.0002	2.936	.0018	.2261	.0101	-.0030	.0049	.0028
#2	.0007	-.0002	2.942	.0014	.2322	.0098	-.0001	.0051	.0028
#3	.0016	.0042	2.931	.0008	.2298	.0094	.0002	.0050	.0027

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1751.4**	**4058.3**	**33062.**	**6563.1**
Stddev	6.5	10.6	47.	32.8
%RSD	.36955	.26223	.14261	.49939
#1	1747.3	4052.0	33008.	6600.5
#2	1748.0	4052.3	33096.	6539.5
#3	1758.8	4070.6	33082.	6549.2

Zoom In Zoom Out

Sample Name: FA40699-1 Acquired: 1/27/2017 16:01:01 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0002**	**.0123**	**.0217**	**.0151**	**.0000**	**20.48**	**-.0001**	**-.0003**	**.0010**
Stddev	.0004	.0031	.0006	.0002	.000	.07	.0000	.0000	.0003
%RSD	223.8	24.92	2.692	1.262	146.8	.3373	8.281	9.759	34.37
#1	-.0007	.0092	.0223	.0149	.0000	20.48	-.0001	-.0003	.0011
#2	-.0001	.0153	.0216	.0153	.0000	20.41	-.0001	-.0003	.0006
#3	.0002	.0124	.0212	.0150	.0000	20.55	-.0001	-.0003	.0013

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**-.0010**	**.0297**	**4.556**	**12.76**	**.0047**	**-.0001**	**41.61**	**.0083**	**-.0020**
Stddev	.0002	.0016	.035	.14	.0000	.0001	.08	.0001	.0005
%RSD	23.71	5.484	.7585	1.118	.9955	83.68	.1976	1.301	26.11
#1	-.0011	.0314	4.572	12.76	.0047	-.0002	41.53	.0083	-.0018
#2	-.0007	.0281	4.579	12.61	.0048	-.0001	41.61	.0082	-.0015
#3	-.0012	.0296	4.516	12.90	.0047	.0000	41.70	.0084	-.0025

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0014**	**.0020**	**14.97**	**.0006**	**.1975**	**.0009**	**-.0012**	**.0002**	**.0053**
Stddev	.0003	.0001	.02	.0003	.0005	.0000	.0014	.0001	.0001
%RSD	22.28	7.069	.1539	50.20	.2614	3.976	119.4	44.88	1.266
#1	.0013	.0018	14.99	.0008	.1972	.0009	-.0028	.0001	.0054
#2	.0012	.0021	14.95	.0008	.1973	.0009	-.0008	.0002	.0053
#3	.0018	.0021	14.97	.0003	.1981	.0009	.0000	.0003	.0054

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1774.5**	**3997.2**	**31588.**	**6165.9**
Stddev	3.0	4.8	24.	27.1
%RSD	.16676	.12028	.07752	.43957
#1	1771.1	3993.4	31617.	6172.4
#2	1776.5	4002.6	31573.	6189.2
#3	1775.9	3995.5	31576.	6136.2

Zoom In Zoom Out

Sample Name: FA40705-7 Acquired: 1/27/2017 16:05:30 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0002**	**1.123**	**-.0009**	**.0250**	**.0000**	**4.673**	**.0000**	**.0001**	**.0053**
Stddev	.0001	.007	.0002	.0003	.0000	.016	.0000	.0001	.0003
%RSD	58.24	.6620	19.34	1.060	1.922	.3453	49.10	216.5	5.561
#1	-.0001	1.131	-.0007	.0251	.0000	4.661	.0001	.0002	.0049
#2	-.0004	1.123	-.0010	.0253	.0000	4.666	.0000	.0001	.0053
#3	-.0002	1.116	-.0009	.0247	.0000	4.691	.0000	-.0001	.0055

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0001**	**.2075**	**1.886**	**5.167**	**.0047**	**-.0002**	**6.938**	**.0018**	**-.0003**
Stddev	.0001	.0058	.035	.004	.0000	.0002	.008	.0003	.0000
%RSD	118.8	2.788	1.838	.0817	.3863	106.5	.1112	14.38	15.85
#1	.0001	.2138	1.887	5.172	.0047	.0000	6.944	.0018	-.0003
#2	.0002	.2066	1.851	5.164	.0046	-.0003	6.942	.0021	-.0003
#3	.0000	.2023	1.921	5.166	.0047	-.0003	6.930	.0015	-.0003

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0026**	**.0019**	**2.943**	**.0006**	**.0445**	**.0209**	**-.0017**	**.0034**	**.0047**
Stddev	.0005	.0002	.001	.0002	.0001	.0006	.0006	.0003	.0000
%RSD	17.54	10.00	.0250	32.50	.3154	2.760	37.58	10.11	.2220
#1	.0022	.0020	2.944	.0005	.0443	.0211	-.0024	.0037	.0047
#2	.0031	.0017	2.943	.0008	.0444	.0202	-.0012	.0035	.0047
#3	.0026	.0020	2.943	.0004	.0446	.0213	-.0014	.0030	.0047

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1806.1**	**4061.3**	**31995.**	**6315.0**
Stddev	5.9	14.0	91.	28.8
%RSD	.32637	.34514	.28408	.45559
#1	1808.5	4077.2	31982.	6312.4
#2	1799.4	4050.5	31912.	6345.0
#3	1810.5	4056.4	32092.	6287.7

Zoom In Zoom Out

Sample Name: FA40709-3 Acquired: 1/27/2017 16:10:00 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0001**	**.0601**	**-.0013**	**.0066**	**-.0001**	**70.02**	**-.0001**	**-.0002**	**.0009**
Stddev	.0002	.0087	.0006	.0001	.0000	.39	.0000	.0001	.0001
%RSD	184.1	14.53	49.74	1.953	61.43	.5567	31.83	49.49	14.55
#1	-.0001	.0538	-.0015	.0066	-.0001	69.91	-.0001	-.0001	.0011
#2	.0001	.0701	-.0017	.0065	-.0001	69.70	-.0001	-.0001	.0008
#3	.0003	.0564	-.0005	.0068	.0000	70.46	-.0001	-.0003	.0008

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**-.0004**	**.4693**	**3.081**	**2.591**	**.0205**	**.0001**	**23.79**	**-.0001**	**-.0003**
Stddev	.0001	.0041	.035	.021	.0001	.0001	.05	.0001	.0006
%RSD	27.65	.8643	1.128	.8039	.4011	80.87	.2144	230.8	195.0
#1	-.0006	.4697	3.046	2.611	.0206	.0001	23.73	-.0001	-.0001
#2	-.0004	.4650	3.082	2.569	.0204	.0002	23.81	.0001	-.0010
#3	-.0004	.4731	3.116	2.594	.0205	.0000	23.82	-.0002	.0002

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0013**	**.0007**	**2.088**	**.0007**	**.2403**	**.0020**	**-.0006**	**.0006**	**.0007**
Stddev	.0004	.0006	.004	.0002	.0003	.0002	.0009	.0001	.0000
%RSD	28.37	92.41	.2128	33.34	.1232	9.380	146.8	18.94	2.150
#1	.0010	.0001	2.089	.0010	.2400	.0022	.0002	.0005	.0008
#2	.0017	.0006	2.083	.0006	.2404	.0018	-.0005	.0007	.0007
#3	.0012	.0013	2.092	.0006	.2406	.0019	-.0015	.0007	.0007

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1777.6**	**3943.5**	**31903.**	**6237.1**
Stddev	1.1	8.6	63.	38.1
%RSD	.06011	.21701	.19845	.61074
#1	1778.4	3933.7	31950.	6226.8
#2	1776.4	3947.8	31929.	6279.3
#3	1777.9	3949.1	31831.	6205.3

Zoom In Zoom Out

Sample Name: FA40709-3F Acquired: 1/27/2017 16:14:29 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0000**	**.0381**	**-.0009**	**.0066**	**.0000**	**69.23**	**-.0001**	**-.0002**	**.0007**
Stddev	.000	.0107	.0007	.0001	.000	.26	.0001	.0000	.0002
%RSD	1704.	28.19	78.54	1.273	67.16	.3700	70.79	17.12	23.76
#1	.0002	.0505	-.0003	.0066	-.0001	69.50	.0000	-.0002	.0009
#2	-.0002	.0317	-.0007	.0067	.0000	69.00	-.0002	-.0003	.0006
#3	.0000	.0321	-.0016	.0065	.0000	69.17	-.0001	-.0002	.0006

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**-.0004**	**.4510**	**3.041**	**2.538**	**.0205**	**.0001**	**23.44**	**-.0001**	**-.0001**
Stddev	.0003	.0012	.008	.006	.0001	.0001	.02	.0001	.0003
%RSD	60.49	.2624	.2647	.2347	.3517	105.2	.1032	95.17	499.3
#1	-.0001	.4523	3.040	2.532	.0206	.0001	23.46	.0000	.0002
#2	-.0006	.4508	3.049	2.541	.0204	.0000	23.42	-.0002	.0000
#3	-.0005	.4500	3.033	2.542	.0205	.0003	23.42	-.0001	-.0003

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0009**	**.0027**	**2.036**	**.0009**	**.2371**	**.0009**	**.0002**	**.0006**	**.0017**
Stddev	.0007	.0011	.005	.0002	.0004	.0001	.0018	.0001	.0001
%RSD	77.02	40.34	.2553	19.57	.1873	7.381	898.0	15.28	4.464
#1	.0002	.0014	2.040	.0011	.2374	.0009	.0023	.0006	.0017
#2	.0017	.0033	2.039	.0008	.2373	.0008	-.0011	.0007	.0016
#3	.0009	.0033	2.030	.0008	.2366	.0010	-.0005	.0005	.0016

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1788.1**	**3978.2**	**31980.**	**6241.8**
Stddev	5.1	18.0	191.	25.5
%RSD	.28332	.45137	.59811	.40816
#1	1793.9	3970.6	31939.	6216.4
#2	1785.0	3965.3	32188.	6267.3
#3	1785.4	3998.7	31812.	6241.7

Zoom In Zoom Out

Sample Name: FA40710-1 Acquired: 1/27/2017 16:19:00 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0001**	**.1615**	**.0010**	**.0064**	**-.0001**	**86.41**	**-.0002**	**-.0003**	**.0008**
Stddev	.0002	.0108	.0006	.0001	.0000	.24	.0000	.0000	.0004
%RSD	276.3	6.714	64.60	1.246	55.42	.2755	19.89	10.46	44.38
#1	-.0001	.1738	.0007	.0065	.0000	86.32	-.0002	-.0003	.0010
#2	-.0002	.1571	.0005	.0065	-.0001	86.67	-.0002	-.0004	.0004
#3	.0001	.1535	.0017	.0063	.0000	86.22	-.0001	-.0003	.0011

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**-.0001**	**2.014**	**3.895**	**3.330**	**.0638**	**.0065**	**3.627**	**-.0001**	**-.0005**
Stddev	.0002	.004	.037	.008	.0002	.0002	.009	.0001	.0006
%RSD	217.7	.2089	.9442	.2516	.3789	2.507	.2525	164.6	129.7
#1	-.0002	2.010	3.927	3.333	.0635	.0064	3.627	-.0003	-.0011
#2	.0001	2.013	3.903	3.336	.0639	.0064	3.636	.0000	.0002
#3	-.0001	2.018	3.855	3.320	.0640	.0067	3.618	.0000	-.0005

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0018**	**.0003**	**7.354**	**.0008**	**.1385**	**.0052**	**-.0016**	**.0005**	**.0005**
Stddev	.0002	.0011	.033	.0002	.0004	.0010	.0012	.0002	.0001
%RSD	11.51	391.4	.4414	18.63	.2543	18.76	74.64	33.63	12.78
#1	.0020	-.0007	7.332	.0008	.1385	.0046	-.0015	.0004	.0005
#2	.0016	.0000	7.339	.0007	.1389	.0047	-.0004	.0007	.0004
#3	.0018	.0015	7.391	.0010	.1381	.0064	-.0028	.0005	.0005

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1780.4**	**3985.9**	**31598.**	**6229.4**
Stddev	3.7	17.7	72.	17.6
%RSD	.20725	.44317	.22799	.28205
#1	1784.1	3998.5	31630.	6240.7
#2	1780.4	3993.4	31649.	6209.2
#3	1776.7	3965.7	31516.	6238.4

Zoom In Zoom Out

Sample Name: MP31558-MB1 Acquired: 1/27/2017 16:23:31 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0004**	**.0049**	**-.0008**	**.0002**	**.0000**	**.0048**	**-.0001**	**-.0001**	**.0003**
Stddev	.0002	.0035	.0007	.0001	.000	.0012	.0000	.0000	.0000
%RSD	40.61	70.64	80.85	53.92	22.12	23.82	1.910	10.86	14.21
#1	-.0002	.0059	-.0010	.0002	-.0001	.0046	-.0001	-.0001	.0003
#2	-.0004	.0011	-.0014	.0001	.0000	.0038	-.0001	-.0001	.0002
#3	-.0006	.0078	-.0001	.0003	.0000	.0061	-.0001	-.0001	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0006**	**-.0004**	**-.0058**	**.0141**	**.0001**	**-.0003**	**.0446**	**-.0003**	**-.0008**
Stddev	.0002	.0017	.0147	.0117	.0000	.0001	.0039	.0001	.0007
%RSD	30.21	423.4	253.8	82.94	58.28	33.51	8.671	33.91	96.10
#1	-.0007	.0004	.0087	.0071	.0000	-.0002	.0486	-.0003	-.0014
#2	-.0007	-.0023	-.0055	.0277	.0001	-.0004	.0409	-.0002	-.0010
#3	-.0004	.0008	-.0206	.0076	.0001	-.0003	.0442	-.0004	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0021**	**.0009**	**.0042**	**.0004**	**.0000**	**-.0002**	**-.0016**	**.0001**	**.0005**
Stddev	.0002	.0016	.0002	.0002	.000	.0000	.0004	.0003	.0000
%RSD	10.04	172.3	5.763	45.19	393.4	20.27	27.36	431.5	2.966
#1	.0020	.0021	.0044	.0004	.0000	-.0002	-.0016	.0000	.0004
#2	.0023	.0015	.0039	.0007	-.0001	-.0003	-.0011	-.0002	.0005
#3	.0019	-.0009	.0044	.0003	.0000	-.0002	-.0019	.0004	.0005
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: MP31558-MB1 Acquired: 1/27/2017 16:23:31 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1770.5	4021.7	31513.	6231.8
Stddev	5.2	13.4	91.	33.8
%RSD	.29167	.33413	.28844	.54235
#1	1766.3	4034.9	31420.	6195.0
#2	1776.2	4022.1	31519.	6261.6
#3	1769.0	4008.0	31601.	6238.7

Zoom In Zoom Out

Sample Name: MP31558-B1 Acquired: 1/27/2017 16:28:04 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0475	30.13	2.020	2.192	.0542	27.88	.0508	.5147	.2093
Stddev	.0007	.05	.005	.005	.0000	.01	.0001	.0012	.0005
%RSD	1.576	.1669	.2631	.2511	.0499	.0367	.1583	.2236	.2404
#1	.0484	30.11	2.017	2.196	.0542	27.87	.0508	.5136	.2091
#2	.0473	30.19	2.017	2.193	.0542	27.89	.0509	.5159	.2098
#3	.0469	30.10	2.026	2.186	.0542	27.87	.0509	.5147	.2088
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2608	29.38	27.23	26.91	.5274	.5511	27.26	.5144	.4980
Stddev	.0006	.08	.06	.01	.0006	.0016	.05	.0015	.0019
%RSD	.2166	.2569	.2380	.0206	.1200	.2861	.1875	.2874	.3857
#1	.2608	29.39	27.17	26.90	.5267	.5493	27.21	.5129	.4977
#2	.2613	29.45	27.30	26.91	.5279	.5523	27.24	.5158	.4962
#3	.2602	29.30	27.21	26.92	.5276	.5518	27.31	.5144	.5000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5120	1.999	.0632	.5525	.5471	.5364	1.982	.4921	.5081
Stddev	.0013	.007	.0009	.0016	.0010	.0021	.004	.0006	.0009
%RSD	.2509	.3389	1.484	.2908	.1799	.3898	.2132	.1126	.1869
#1	.5127	1.998	.0622	.5527	.5466	.5388	1.987	.4921	.5077
#2	.5105	1.992	.0633	.5541	.5483	.5350	1.978	.4916	.5092
#3	.5127	2.006	.0640	.5509	.5466	.5354	1.982	.4927	.5075
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: MP31558-B1 Acquired: 1/27/2017 16:28:04 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1753.0	3972.2	31886.	6273.4
Stddev	2.7	6.4	73.	19.4
%RSD	.15442	.16220	.22851	.30881
#1	1750.1	3974.4	31906.	6251.9
#2	1755.4	3964.9	31948.	6278.7
#3	1753.5	3977.2	31806.	6289.5

Zoom In Zoom Out

Sample Name: FA40660-2 Acquired: 1/27/2017 16:32:18 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0002	.0565	-.0020	.0161	.0000	3.252	-.0001	-.0002	.0003
Stddev	.0001	.0057	.0005	.0002	.000	.015	.0001	.0000	.0001
%RSD	57.86	10.07	24.31	1.128	155.6	.4692	85.54	15.46	32.73
#1	-.0003	.0627	-.0015	.0160	.0000	3.266	.0000	-.0002	.0004
#2	-.0003	.0550	-.0025	.0163	.0000	3.253	-.0001	-.0002	.0002
#3	-.0001	.0516	-.0020	.0159	.0000	3.236	.0000	-.0002	.0004

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0008	.0276	.6218	1.149	.0010	.0001	10.75	-.0001	-.0001
Stddev	.0002	.0011	.0204	.015	.0000	.0002	.05	.0001	.0006
%RSD	26.86	3.865	3.279	1.270	1.805	142.9	.4456	78.13	602.2
#1	-.0009	.0265	.6048	1.139	.0010	.0003	10.80	-.0001	-.0007
#2	-.0005	.0287	.6444	1.166	.0010	.0000	10.75	-.0003	-.0001
#3	-.0008	.0276	.6161	1.142	.0010	.0000	10.70	-.0001	.0005

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0011	.0022	4.772	.0002	.0082	.0011	-.0023	.0001	.0037
Stddev	.0009	.0003	.008	.0003	.0001	.0001	.0003	.0000	.0000
%RSD	82.64	12.24	.1725	104.9	1.189	11.70	13.82	48.95	1.120
#1	.0004	.0019	4.773	.0004	.0084	.0011	-.0019	.0000	.0037
#2	.0008	.0023	4.779	.0000	.0082	.0010	-.0025	.0001	.0036
#3	.0022	.0023	4.763	.0004	.0082	.0012	-.0024	.0001	.0037

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1808.4	4062.4	31994.	6301.3
Stddev	3.4	12.6	81.	45.7
%RSD	.18704	.30926	.25229	.72489
#1	1809.1	4067.5	32064.	6284.0
#2	1804.8	4048.1	31906.	6266.8
#3	1811.4	4071.7	32012.	6353.1

Zoom In Zoom Out

Sample Name: MP31558-D1 Acquired: 1/27/2017 16:36:50 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0002**	**.0413**	**-.0008**	**.0161**	**.0000**	**3.254**	**-.0001**	**-.0002**	**.0004**
Stddev	.0001	.0065	.0003	.0001	.000	.011	.0000	.0001	.0004
%RSD	36.88	15.69	36.56	.4777	320.5	.3221	49.77	54.68	96.10
#1	-.0002	.0462	-.0004	.0161	.0000	3.243	-.0001	-.0003	.0000
#2	-.0001	.0438	-.0009	.0160	.0000	3.264	-.0001	-.0003	.0007
#3	-.0001	.0339	-.0010	.0160	.0000	3.255	.0000	-.0001	.0006

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**-.0011**	**.0194**	**.6321**	**1.192**	**.0009**	**-.0002**	**10.79**	**-.0002**	**-.0002**
Stddev	.0002	.0016	.0168	.015	.0000	.0001	.01	.0001	.0002
%RSD	14.65	8.079	2.654	1.231	2.690	63.89	.0888	41.89	81.18
#1	-.0011	.0205	.6512	1.209	.0009	-.0001	10.79	-.0001	-.0002
#2	-.0010	.0176	.6200	1.181	.0009	-.0003	10.78	-.0002	.0000
#3	-.0013	.0200	.6250	1.187	.0009	-.0002	10.80	-.0003	-.0004

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0021**	**.0011**	**4.770**	**.0007**	**.0083**	**.0008**	**-.0005**	**.0001**	**.0031**
Stddev	.0007	.0012	.018	.0004	.0001	.0001	.0015	.0002	.0001
%RSD	31.49	107.8	.3821	48.64	1.189	8.180	301.4	410.1	2.989
#1	.0028	-.0002	4.753	.0008	.0082	.0007	-.0018	.0000	.0032
#2	.0021	.0022	4.766	.0010	.0083	.0008	-.0008	-.0002	.0030
#3	.0014	.0014	4.789	.0003	.0083	.0008	.0011	.0003	.0030

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1794.1**	**4052.4**	**31642.**	**6200.6**
Stddev	2.0	10.4	60.	37.3
%RSD	.10891	.25639	.18837	.60149
#1	1796.3	4064.2	31690.	6236.0
#2	1792.7	4048.3	31575.	6161.7
#3	1793.1	4044.7	31661.	6204.2

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/27/2017 16:41:21 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2560**	**39.68**	**1.891**	**2.018**	**1.980**	**38.85**	**1.933**	**1.947**	**1.973**
Stddev	.0008	.02	.008	.005	.003	.01	.004	.003	.003
%RSD	.2942	.0590	.4097	.2346	.1549	.0325	.2027	.1424	.1579
#1	.2568	39.71	1.883	2.020	1.978	38.84	1.928	1.944	1.971
#2	.2555	39.68	1.899	2.013	1.978	38.86	1.936	1.950	1.977
#3	.2555	39.67	1.890	2.022	1.983	38.86	1.934	1.948	1.972
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.951**	**39.86**	**38.06**	**38.73**	**1.956**	**2.012**	**38.43**	**1.909**	**1.919**
Stddev	.006	.00	.08	.05	.001	.005	.06	.006	.002
%RSD	.3313	.0112	.2044	.1223	.0305	.2348	.1476	.3344	.1112
#1	1.958	39.87	37.98	38.71	1.955	2.007	38.49	1.903	1.917
#2	1.949	39.86	38.07	38.78	1.956	2.014	38.37	1.916	1.919
#3	1.945	39.86	38.14	38.69	1.955	2.016	38.43	1.907	1.921
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.895**	**1.915**	**2.448**	**2.047**	**2.015**	**2.011**	**1.914**	**2.000**	**1.911**
Stddev	.007	.006	.014	.004	.003	.006	.004	.002	.004
%RSD	.3516	.3072	.5831	.2039	.1246	.3030	.2028	.0768	.2223
#1	1.887	1.910	2.431	2.048	2.016	2.018	1.917	2.001	1.906
#2	1.899	1.921	2.455	2.051	2.012	2.010	1.909	2.001	1.914
#3	1.898	1.914	2.457	2.043	2.017	2.006	1.915	1.998	1.913
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/27/2017 16:41:21 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1736.1**	**4019.2**	**31808.**	**6223.3**
Stddev	2.7	9.4	99.	11.7
%RSD	.15618	.23442	.31190	.18773
#1	1735.6	4025.3	31724.	6214.9
#2	1733.7	4008.3	31783.	6218.5
#3	1739.0	4024.0	31917.	6236.7

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/27/2017 16:45:34 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0133**	**-.0006**	**.0003**	**.0002**	**.0039**	**.0000**	**.0001**	**.0003**
Stddev	.0002	.0073	.0011	.0001	.0001	.0015	.0001	.0001	.0003
%RSD	90.53	54.75	175.3	39.34	32.65	38.49	272.3	155.3	101.5
#1	.0001	.0050	.0006	.0003	.0003	.0051	.0001	.0002	.0003
#2	.0004	.0186	-.0010	.0002	.0002	.0045	.0000	.0000	.0006
#3	.0001	.0165	-.0014	.0004	.0002	.0022	.0000	.0000	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0011**	**.0087**	**.0151**	**.0193**	**.0003**	F **.0016**	**.0429**	**.0001**	**-.0004**
Stddev	.0002	.0012	.0300	.0088	.0001	.0005	.0093	.0001	.0007
%RSD	14.87	14.11	198.5	45.46	34.23	31.03	21.72	115.3	171.7
#1	-.0013	.0092	.0491	.0272	.0002	.0021	.0400	.0002	-.0002
#2	-.0010	.0096	-.0076	.0208	.0004	.0016	.0354	.0000	-.0012
#3	-.0010	.0073	.0039	.0099	.0002	.0011	.0533	.0001	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0013**	**.0011**	**.0007**	**.0002**	**.0003**	**.0003**	**.0015**	**.0005**	**.0001**
Stddev	.0005	.0009	.0004	.0002	.0001	.0001	.0008	.0002	.0001
%RSD	41.08	79.95	51.09	113.9	16.22	34.27	50.03	40.95	50.28
#1	.0008	.0006	.0003	.0003	.0004	.0003	.0015	.0004	.0002
#2	.0018	.0006	.0007	-.0001	.0003	.0002	.0023	.0007	.0000
#3	.0012	.0022	.0010	.0003	.0003	.0004	.0008	.0003	.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/27/2017 16:45:34 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1825.6**	**4129.5**	**32445.**	**6372.0**
Stddev	3.0	3.9	50.	6.9
%RSD	.16353	.09451	.15545	.10793
#1	1822.3	4125.0	32503.	6368.6
#2	1827.9	4132.2	32415.	6380.0
#3	1826.7	4131.1	32416.	6367.6

Zoom In Zoom Out

Sample Name: MP31558-SD1 Acquired: 1/27/2017 16:50:07 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0004**	**.0386**	**-.0032**	**.0169**	**.0000**	**3.288**	**-.0001**	**-.0008**	**.0009**
Stddev	.0011	.0114	.0026	.0014	.000	.017	.0002	.0004	.0016
%RSD	271.4	29.54	79.84	8.170	10610.	.5059	381.1	42.74	171.7
#1	-.0011	.0498	-.0030	.0153	.0002	3.303	-.0001	-.0005	.0024
#2	-.0009	.0270	-.0008	.0180	-.0003	3.292	.0002	-.0012	-.0007
#3	.0008	.0389	-.0060	.0173	.0001	3.270	-.0002	-.0008	.0010

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**-.0066**	**.0328**	**.6849**	**1.183**	**.0015**	**.0011**	**10.82**	**-.0001**	**-.0031**
Stddev	.0014	.0032	.0571	.086	.0001	.0007	.08	.0008	.0024
%RSD	20.74	9.906	8.332	7.305	9.954	64.96	.6972	636.3	78.50
#1	-.0061	.0339	.6416	1.085	.0016	.0019	10.74	-.0008	-.0057
#2	-.0055	.0291	.7496	1.217	.0014	.0010	10.89	-.0004	-.0025
#3	-.0081	.0353	.6636	1.247	.0014	.0005	10.82	.0008	-.0010

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0091**	**.0021**	**4.799**	**.0028**	**.0083**	**.0016**	**-.0037**	**.0007**	**.0447**
Stddev	.0007	.0084	.014	.0020	.0001	.0007	.0019	.0009	.0003
%RSD	8.216	400.4	.2865	71.68	.8027	42.47	51.97	138.0	.6723
#1	.0090	.0070	4.784	.0046	.0082	.0008	-.0046	.0017	.0444
#2	.0085	-.0076	4.811	.0031	.0083	.0018	-.0015	.0004	.0447
#3	.0099	.0068	4.803	.0006	.0082	.0021	-.0050	-.0001	.0450

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1834.7**	**4162.3**	**32508.**	**6358.5**
Stddev	1.3	8.2	133.	21.6
%RSD	.07310	.19798	.41063	.33999
#1	1833.9	4171.5	32360.	6381.9
#2	1833.9	4160.1	32618.	6339.4
#3	1836.3	4155.4	32546.	6354.1

Zoom In Zoom Out

Sample Name: MP31558-PS1 Acquired: 1/27/2017 16:54:38 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0486**	**2.897**	**.1061**	**.3091**	**.0561**	**8.951**	**.0538**	**.0539**	**.0568**
Stddev	.0002	.018	.0009	.0014	.0002	.027	.0001	.0000	.0003
%RSD	.4458	.6096	.8714	.4508	.3162	.3054	.1236	.0774	.5131
#1	.0484	2.915	.1072	.3107	.0563	8.953	.0538	.0539	.0569
#2	.0488	2.895	.1055	.3083	.0562	8.977	.0537	.0538	.0570
#3	.0485	2.880	.1057	.3082	.0559	8.922	.0537	.0539	.0564

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.1090**	**3.513**	**11.22**	**6.685**	**.0568**	**.1087**	**21.51**	**.1055**	**.0504**
Stddev	.0005	.005	.08	.004	.0003	.0003	.09	.0004	.0005
%RSD	.4726	.1447	.6766	.0610	.6069	.2660	.4179	.4218	1.068
#1	.1095	3.518	11.30	6.689	.0566	.1086	21.60	.1061	.0511
#2	.1085	3.508	11.21	6.681	.0572	.1091	21.52	.1054	.0502
#3	.1088	3.514	11.14	6.684	.0565	.1086	21.42	.1052	.0501

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.1113**	**.1015**	**4.845**	**.0527**	**.0620**	**.1098**	**.0984**	**.0522**	**.2785**
Stddev	.0006	.0005	.004	.0005	.0003	.0007	.0011	.0003	.0013
%RSD	.5554	.4621	.0866	.9126	.5417	.6756	1.141	.5334	.4840
#1	.1108	.1013	4.842	.0532	.0624	.1106	.0974	.0525	.2791
#2	.1120	.1020	4.850	.0522	.0617	.1098	.0982	.0521	.2795
#3	.1111	.1011	4.843	.0528	.0620	.1091	.0996	.0521	.2770

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1758.7**	**3971.3**	**31147.**	**6038.6**
Stddev	4.0	13.0	78.	28.1
%RSD	.22826	.32753	.24927	.46520
#1	1758.1	3973.1	31073.	6007.4
#2	1755.1	3957.6	31227.	6046.9
#3	1763.0	3983.4	31140.	6061.7

Zoom In Zoom Out

Sample Name: MP31558-S1 Acquired: 1/27/2017 16:58:58 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0483**	**30.37**	**2.030**	**2.229**	**.0544**	**31.26**	**.0514**	**.5190**	**.2113**
Stddev	.0004	.04	.000	.003	.0003	.17	.0002	.0006	.0004
%RSD	.8099	.1197	.0097	.1182	.5820	.5495	.2943	.1236	.1760
#1	.0484	30.40	2.030	2.228	.0546	31.37	.0515	.5195	.2116
#2	.0487	30.39	2.030	2.227	.0545	31.36	.0513	.5182	.2109
#3	.0479	30.33	2.030	2.232	.0540	31.07	.0513	.5192	.2114

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.2643**	**29.61**	**27.98**	**28.27**	**.5318**	**.5540**	**38.52**	**.5173**	**.5017**
Stddev	.0007	.08	.01	.19	.0009	.0003	.04	.0014	.0013
%RSD	.2589	.2836	.0508	.6890	.1649	.0474	.0908	.2642	.2528
#1	.2648	29.70	27.98	28.36	.5329	.5543	38.55	.5188	.5027
#2	.2635	29.60	28.00	28.40	.5313	.5540	38.52	.5161	.5002
#3	.2646	29.53	27.97	28.05	.5314	.5538	38.48	.5170	.5020

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.5154**	**2.013**	**5.154**	**.5575**	**.5559**	**.5382**	**1.998**	**.4960**	**.5122**
Stddev	.0004	.004	.012	.0005	.0007	.0020	.010	.0011	.0016
%RSD	.0796	.2158	.2235	.0837	.1180	.3706	.4800	.2176	.3086
#1	.5150	2.018	5.162	.5579	.5561	.5405	1.992	.4972	.5133
#2	.5158	2.013	5.160	.5575	.5564	.5367	1.992	.4950	.5104
#3	.5154	2.009	5.141	.5570	.5552	.5375	2.009	.4958	.5129

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1727.9**	**3937.8**	**31439.**	**6212.8**
Stddev	1.3	6.7	62.	29.6
%RSD	.07755	.17047	.19576	.47633
#1	1728.6	3936.3	31372.	6195.7
#2	1726.4	3931.9	31494.	6195.8
#3	1728.7	3945.1	31451.	6247.0

SGS ACCUTEST FA40657

Zoom In Zoom Out

Sample Name: MP31558-S2 Acquired: 1/27/2017 17:03:11 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0464**	**29.50**	**1.971**	**2.170**	**.0529**	**30.45**	**.0496**	**.5033**	**.2053**
Stddev	.0005	.05	.012	.003	.0001	.02	.0001	.0020	.0011
%RSD	1.115	.1778	.6219	.1192	.1919	.0789	.1731	.3897	.5585
#1	.0460	29.55	1.985	2.172	.0529	30.48	.0497	.5055	.2040
#2	.0470	29.50	1.967	2.171	.0530	30.45	.0497	.5018	.2055
#3	.0462	29.45	1.962	2.167	.0528	30.43	.0495	.5025	.2063

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.2557**	**28.77**	**27.30**	**27.45**	**.5185**	**.5396**	**37.35**	**.5028**	**.4870**
Stddev	.0014	.06	.08	.03	.0011	.0024	.15	.0021	.0030
%RSD	.5622	.2253	.2851	.1177	.2170	.4466	.3972	.4103	.6242
#1	.2566	28.70	27.39	27.49	.5179	.5424	37.51	.5051	.4903
#2	.2563	28.78	27.27	27.43	.5178	.5381	37.33	.5022	.4844
#3	.2540	28.83	27.25	27.44	.5198	.5384	37.21	.5010	.4864

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.5014**	**1.950**	**4.892**	**.5411**	**.5426**	**.5231**	**1.942**	**.4824**	**.4997**
Stddev	.0054	.020	.024	.0026	.0011	.0014	.009	.0017	.0014
%RSD	1.074	1.038	.4839	.4749	.2007	.2725	.4418	.3573	.2895
#1	.5076	1.973	4.917	.5440	.5439	.5217	1.952	.4821	.5012
#2	.4979	1.935	4.869	.5391	.5421	.5246	1.935	.4808	.4997
#3	.4988	1.941	4.889	.5401	.5419	.5229	1.939	.4842	.4983

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1745.9**	**3974.8**	**31654.**	**6251.4**
Stddev	11.0	26.4	84.	12.7
%RSD	.62842	.66507	.26678	.20281
#1	1733.2	3944.4	31707.	6257.7
#2	1752.1	3991.6	31557.	6236.8
#3	1752.3	3988.5	31699.	6259.7

Zoom In Zoom Out

Sample Name: FA40661-1 Acquired: 1/27/2017 17:07:24 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0001**	**.0204**	**-.0005**	**.0199**	**.0000**	**46.44**	**.0004**	**-.0001**	**.0007**
Stddev	.0003	.0034	.0004	.0002	.000	.03	.0000	.0000	.0001
%RSD	307.8	16.87	71.99	1.245	50.99	.0676	8.802	54.68	12.85
#1	.0000	.0178	-.0003	.0198	.0000	46.46	.0004	-.0001	.0007
#2	.0001	.0243	-.0004	.0202	.0000	46.40	.0004	-.0001	.0007
#3	-.0005	.0192	-.0010	.0198	.0000	46.44	.0005	-.0001	.0006

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**-.0004**	**.7232**	**.4050**	**4.904**	**.0467**	**.0008**	**51.69**	**.0008**	**.0427**
Stddev	.0004	.0011	.0342	.062	.0003	.0002	.05	.0001	.0005
%RSD	97.98	.1479	8.440	1.267	.6925	27.19	.1017	17.51	1.145
#1	-.0002	.7223	.4220	4.941	.0465	.0010	51.75	.0009	.0433
#2	-.0009	.7244	.3656	4.832	.0470	.0007	51.68	.0007	.0424
#3	-.0002	.7231	.4273	4.939	.0465	.0006	51.64	.0007	.0425

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0017**	**.0011**	**1.608**	**.0009**	**.1410**	**.0009**	**.0012**	**-.0002**	**2.959**
Stddev	.0005	.0003	.007	.0003	.0002	.0001	.0018	.0002	.004
%RSD	30.42	22.47	.4555	33.48	.1278	14.57	142.5	75.73	.1257
#1	.0013	.0014	1.608	.0011	.1411	.0010	-.0004	-.0004	2.963
#2	.0023	.0009	1.601	.0012	.1408	.0008	.0031	.0000	2.960
#3	.0015	.0011	1.615	.0006	.1412	.0009	.0010	-.0002	2.955

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1782.5**	**4017.6**	**31634.**	**6127.2**
Stddev	3.4	10.0	42.	9.5
%RSD	.19228	.24975	.13195	.15518
#1	1785.8	4020.3	31597.	6131.6
#2	1782.8	4025.9	31626.	6116.3
#3	1778.9	4006.4	31680.	6133.8

Zoom In Zoom Out

Sample Name: FA40661-2 Acquired: 1/27/2017 17:11:52 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0001**	**.0145**	**-.0016**	**.0871**	**.0000**	**30.01**	**.0000**	**.0007**	**.0109**
Stddev	.0001	.0062	.0011	.0002	.000	.11	.000	.0001	.0006
%RSD	124.2	42.48	66.28	.2732	76.75	.3547	25.05	8.742	5.504
#1	-.0001	.0212	-.0022	.0873	.0000	29.93	-.0001	.0007	.0114
#2	-.0002	.0134	-.0022	.0868	.0000	29.97	-.0001	.0007	.0110
#3	.0000	.0090	-.0004	.0871	-.0001	30.13	.0000	.0006	.0103

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0002**	**.4296**	**5.229**	**8.847**	**.0730**	**.0005**	**63.32**	**.1362**	**-.0011**
Stddev	.0002	.0018	.009	.036	.0003	.0002	.02	.0001	.0006
%RSD	80.32	.4139	.1618	.4085	.3988	35.34	.0251	.0663	52.09
#1	.0003	.4276	5.236	8.807	.0731	.0005	63.34	.1361	-.0014
#2	.0000	.4306	5.232	8.877	.0727	.0003	63.33	.1363	-.0004
#3	.0004	.4307	5.220	8.858	.0732	.0006	63.30	.1361	-.0013

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0017**	**.0011**	**8.923**	**.0003**	**.1181**	**.0009**	**-.0016**	**.0005**	**.0085**
Stddev	.0003	.0011	.010	.0001	.0004	.0000	.0010	.0001	.0001
%RSD	18.36	106.3	.1136	42.94	.2999	3.523	60.54	17.73	1.161
#1	.0017	.0007	8.912	.0002	.1177	.0009	-.0019	.0006	.0084
#2	.0014	.0002	8.923	.0004	.1184	.0008	-.0005	.0004	.0086
#3	.0020	.0023	8.933	.0002	.1182	.0009	-.0024	.0006	.0085

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1772.8**	**3983.7**	**31617.**	**6115.0**
Stddev	1.5	5.2	147.	27.0
%RSD	.08180	.13063	.46587	.44234
#1	1771.4	3985.5	31671.	6118.9
#2	1772.7	3987.8	31731.	6139.9
#3	1774.2	3977.9	31451.	6086.2

Zoom In Zoom Out

Sample Name: FA40661-3 Acquired: 1/27/2017 17:16:21 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0001**	**3.104**	**.0005**	**.0535**	**.0001**	**12.30**	**-.0001**	**.0005**	**.0047**
Stddev	.0002	.029	.0005	.0003	.0000	.02	.0000	.0001	.0002
%RSD	222.7	.9363	91.99	.5528	4.060	.1350	14.05	11.02	3.269
#1	-.0003	3.137	.0008	.0538	.0001	12.32	-.0001	.0005	.0049
#2	.0001	3.092	.0007	.0533	.0001	12.30	-.0001	.0005	.0046
#3	-.0001	3.082	.0000	.0535	.0001	12.29	-.0001	.0004	.0046

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0028**	**2.429**	**.6732**	**6.823**	**.0323**	**.0001**	**19.24**	**.0040**	**.0005**
Stddev	.0001	.016	.0179	.043	.0001	.0000	.04	.0001	.0005
%RSD	3.101	.6488	2.653	.6300	.2886	28.45	.2180	2.608	119.2
#1	.0029	2.447	.6936	6.872	.0324	.0002	19.28	.0040	.0006
#2	.0027	2.421	.6654	6.805	.0322	.0001	19.24	.0039	.0009
#3	.0028	2.419	.6605	6.792	.0323	.0001	19.20	.0041	-.0001

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0025**	**-.0012**	**17.07**	**.0009**	**.0561**	**.0968**	**-.0005**	**.0065**	**.1226**
Stddev	.0006	.0013	.06	.0002	.0002	.0045	.0009	.0002	.0004
%RSD	23.28	110.7	.3667	19.74	.3433	4.642	159.0	2.422	.3151
#1	.0032	-.0025	17.02	.0008	.0563	.0923	.0004	.0066	.1226
#2	.0022	.0000	17.06	.0008	.0559	.0967	-.0013	.0063	.1222
#3	.0022	-.0010	17.14	.0011	.0561	.1013	-.0007	.0065	.1229

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1790.3**	**4041.3**	**31962.**	**6381.1**
Stddev	5.8	17.9	35.	27.6
%RSD	.32441	.44386	.11060	.43303
#1	1797.0	4061.7	31990.	6350.2
#2	1786.4	4034.4	31923.	6403.6
#3	1787.5	4027.8	31974.	6389.3

Zoom In Zoom Out

Sample Name: FA40645-3A Acquired: 1/27/2017 17:20:47 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0000**	**.0176**	**.0117**	**.0188**	**-.0001**	**92.08**	**-.0003**	**-.0003**	**.0006**
Stddev	.000	.0037	.0010	.0001	.0000	.40	.0001	.0001	.0003
%RSD	40.95	21.19	8.934	.6731	82.44	.4306	20.29	25.39	56.31
#1	-.0001	.0215	.0105	.0187	-.0001	92.53	-.0003	-.0003	.0008
#2	.0000	.0171	.0121	.0190	.0000	91.78	-.0002	-.0002	.0002
#3	.0000	.0141	.0125	.0189	-.0001	91.93	-.0003	-.0004	.0007

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0005**	**6.541**	**1.455**	**9.870**	**.0265**	**.0080**	**57.57**	**-.0006**	**-.0009**
Stddev	.0001	.016	.008	.070	.0002	.0001	.07	.0000	.0002
%RSD	25.44	.2397	.5314	.7122	.5855	1.311	.1190	3.572	18.08
#1	.0007	6.556	1.446	9.940	.0267	.0081	57.61	-.0006	-.0008
#2	.0004	6.525	1.461	9.800	.0266	.0079	57.60	-.0006	-.0008
#3	.0005	6.542	1.457	9.871	.0264	.0081	57.49	-.0005	-.0011

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0022**	**.0012**	**5.504**	**.0005**	**1.766**	**.0008**	**-.0010**	**-.0001**	**.0030**
Stddev	.0007	.0010	.001	.0001	.002	.0001	.0009	.0001	.0001
%RSD	33.46	77.44	.0180	25.21	.1042	10.56	89.82	98.00	1.788
#1	.0014	.0007	5.505	.0005	1.767	.0009	-.0011	-.0001	.0030
#2	.0028	.0006	5.505	.0005	1.766	.0007	-.0001	.0000	.0030
#3	.0023	.0024	5.503	.0003	1.764	.0009	-.0018	-.0001	.0031

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1694.1**	**3792.0**	**30561.**	**6052.4**
Stddev	3.9	7.2	41.	21.8
%RSD	.23266	.18979	.13532	.36074
#1	1691.7	3785.9	30557.	6031.1
#2	1691.9	3790.2	30604.	6074.7
#3	1698.6	3800.0	30522.	6051.3

Zoom In Zoom Out

Sample Name: FA40645-5A Acquired: 1/27/2017 17:25:16 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0002**	**.0332**	**-.0012**	**.0030**	**.0000**	**15.80**	**-.0001**	**-.0002**	**.0005**
Stddev	.0001	.0102	.0006	.0001	.000	.09	.0000	.0001	.0003
%RSD	43.89	30.73	51.27	2.948	54.47	.5797	19.90	66.87	53.33
#1	-.0003	.0442	-.0010	.0029	.0000	15.88	-.0001	-.0001	.0002
#2	-.0003	.0240	-.0019	.0031	-.0001	15.81	-.0001	-.0003	.0006
#3	-.0001	.0313	-.0008	.0031	.0000	15.70	-.0002	-.0001	.0008

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**-.0006**	**.1110**	**1.395**	**1.670**	**.0074**	**.0692**	**F 92.01**	**-.0002**	**-.0003**
Stddev	.0002	.0009	.006	.016	.0000	.0001	.26	.0001	.0006
%RSD	29.30	.7852	.4627	.9424	.1601	.2076	.2859	52.09	246.3
#1	-.0008	.1109	1.401	1.662	.0073	.0690	92.17	-.0002	.0000
#2	-.0004	.1102	1.388	1.688	.0074	.0692	92.15	-.0002	-.0010
#3	-.0006	.1119	1.396	1.659	.0074	.0693	91.70	-.0001	.0002

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0019**	**-.0004**	**2.891**	**.0011**	**.2187**	**.0006**	**-.0011**	**.0007**	**.0024**
Stddev	.0017	.0015	.002	.0003	.0010	.0001	.0019	.0001	.0001
%RSD	87.01	368.4	.0544	28.73	.4462	12.79	169.4	17.70	2.129
#1	.0025	-.0020	2.892	.0015	.2192	.0006	-.0033	.0008	.0024
#2	.0032	-.0002	2.892	.0010	.2194	.0005	-.0002	.0006	.0025
#3	.0000	.0010	2.889	.0009	.2176	.0006	.0001	.0007	.0024

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1746.1**	**3955.3**	**31324.**	**6009.9**
Stddev	5.6	6.5	59.	37.4
%RSD	.31871	.16312	.18835	.62292
#1	1740.8	3952.0	31390.	5986.2
#2	1745.6	3951.2	31302.	5990.4
#3	1751.9	3962.8	31278.	6053.0

Zoom In Zoom Out

Sample Name: FA40645-6A Acquired: 1/27/2017 17:29:46 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0001**	**.0242**	**-.0002**	**.0270**	**-.0001**	**103.7**	**-.0002**	**-.0003**	**.0005**
Stddev	.0005	.0065	.0010	.0002	.0000	.6	.0000	.0000	.0002
%RSD	387.7	26.91	424.7	.9213	56.04	.5937	21.04	15.10	42.92
#1	.0003	.0295	-.0002	.0269	.0000	104.2	-.0002	-.0003	.0005
#2	-.0006	.0170	.0007	.0273	-.0001	103.0	-.0002	-.0003	.0008
#3	-.0001	.0262	-.0012	.0268	-.0001	103.8	-.0002	-.0002	.0003

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**-.0003**	**2.517**	**16.93**	**3.628**	**.0786**	**.0218**	**14.23**	**.0000**	**.0004**
Stddev	.0002	.020	.07	.025	.0002	.0002	.07	.000	.0002
%RSD	60.40	.7943	.4233	.7019	.1973	.9768	.4651	214.7	60.92
#1	-.0002	2.530	17.01	3.656	.0786	.0219	14.30	.0000	.0001
#2	-.0002	2.494	16.90	3.624	.0785	.0216	14.17	.0000	.0005
#3	-.0005	2.528	16.87	3.605	.0788	.0220	14.22	-.0001	.0006

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0019**	**.0011**	**2.542**	**.0009**	**.6868**	**.0008**	**-.0014**	**.0002**	**.1025**
Stddev	.0013	.0014	.002	.0002	.0027	.0000	.0021	.0002	.0004
%RSD	72.19	124.6	.0774	22.79	.3897	3.126	152.6	114.6	.3731
#1	.0004	-.0005	2.540	.0011	.6898	.0008	.0005	.0002	.1021
#2	.0021	.0023	2.542	.0008	.6848	.0009	-.0009	.0000	.1029
#3	.0031	.0016	2.544	.0007	.6857	.0008	-.0037	.0004	.1025

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1731.0**	**3874.9**	**30958.**	**6000.5**
Stddev	1.6	2.5	22.	31.9
%RSD	.09223	.06482	.07202	.53096
#1	1730.1	3873.2	30952.	5969.1
#2	1730.1	3873.8	30983.	6032.8
#3	1732.8	3877.8	30940.	5999.6

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/27/2017 17:34:14 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2567**	**39.36**	**1.899**	**2.020**	**1.973**	**39.01**	**1.944**	**1.957**	**1.972**
Stddev	.0016	.03	.003	.005	.004	.17	.002	.000	.005
%RSD	.6110	.0706	.1794	.2271	.2025	.4455	.1096	.0145	.2411
#1	.2550	39.35	1.896	2.017	1.976	39.16	1.942	1.956	1.970
#2	.2571	39.34	1.903	2.025	1.975	39.05	1.946	1.957	1.969
#3	.2580	39.39	1.897	2.017	1.968	38.82	1.943	1.957	1.978
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.931**	**39.66**	**38.21**	**38.62**	**1.974**	**2.024**	**38.49**	**1.919**	**1.933**
Stddev	.007	.09	.07	.26	.004	.004	.03	.003	.004
%RSD	.3765	.2340	.1817	.6614	.1776	.2051	.0729	.1625	.1878
#1	1.935	39.76	38.27	38.78	1.970	2.020	38.50	1.916	1.931
#2	1.923	39.66	38.23	38.74	1.974	2.024	38.50	1.922	1.937
#3	1.936	39.57	38.14	38.32	1.977	2.028	38.45	1.920	1.931
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.907**	**1.933**	**2.460**	**2.054**	**2.009**	**2.001**	**1.928**	**2.009**	**1.927**
Stddev	.001	.001	.001	.002	.002	.005	.004	.003	.004
%RSD	.0582	.0256	.0489	.1038	.1112	.2669	.2202	.1562	.1960
#1	1.906	1.933	2.459	2.053	2.011	2.001	1.923	2.010	1.927
#2	1.907	1.933	2.460	2.054	2.009	1.995	1.932	2.005	1.931
#3	1.908	1.934	2.462	2.057	2.007	2.006	1.927	2.011	1.923
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/27/2017 17:34:14 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1733.5**	**4014.5**	**31895.**	**6239.1**
Stddev	2.5	8.8	67.	25.2
%RSD	.14444	.21962	.21098	.40319
#1	1732.4	4019.1	31887.	6227.7
#2	1736.4	4020.1	31966.	6221.6
#3	1731.8	4004.3	31832.	6267.9

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/27/2017 17:38:25 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**.0058**	**-.0006**	**.0004**	**.0001**	**.0031**	**.0000**	**.0000**	**.0000**
Stddev	.0002	.0068	.0005	.0001	.0000	.0026	.0000	.000	.0004
%RSD	251.0	118.1	89.87	28.09	19.11	83.73	169.1	216.1	1794.
#1	-.0002	.0135	.0000	.0002	.0001	.0005	.0000	.0000	.0003
#2	-.0001	.0005	-.0007	.0004	.0001	.0056	.0000	.0000	-.0005
#3	.0001	.0034	-.0011	.0004	.0001	.0031	.0001	-.0001	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0012**	**.0063**	**-.0027**	**.0170**	**.0001**	**F .0015**	**.0461**	**-.0001**	**-.0004**
Stddev	.0002	.0008	.0213	.0177	.0000	.0005	.0034	.0001	.0001
%RSD	18.67	12.44	795.3	104.3	30.52	35.01	7.385	158.0	28.93
#1	-.0015	.0059	-.0270	-.0035	.0002	.0020	.0483	-.0002	-.0006
#2	-.0011	.0057	.0129	.0281	.0001	.0014	.0478	.0000	-.0004
#3	-.0011	.0071	.0060	.0264	.0001	.0010	.0422	-.0001	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0019**	**.0005**	**.0004**	**.0005**	**.0002**	**.0002**	**-.0001**	**.0002**	**-.0001**
Stddev	.0010	.0017	.0007	.0002	.0000	.0001	.0010	.0001	.0000
%RSD	54.45	360.2	153.1	42.16	20.89	48.72	872.3	27.78	11.80
#1	.0009	.0023	-.0001	.0006	.0002	.0002	-.0001	.0002	-.0001
#2	.0019	.0000	.0003	.0007	.0002	.0001	-.0011	.0003	-.0001
#3	.0029	-.0009	.0012	.0003	.0001	.0003	.0009	.0002	-.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/27/2017 17:38:25 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1830.8**	**4164.6**	**32508.**	**6333.1**
Stddev	3.7	10.6	62.	43.5
%RSD	.20465	.25548	.19082	.68614
#1	1827.6	4152.5	32545.	6342.4
#2	1829.9	4172.8	32437.	6371.1
#3	1834.9	4168.4	32544.	6285.7

Zoom In Zoom Out

Sample Name: FA40645-7A Acquired: 1/27/2017 17:42:58 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0004**	**.0246**	**.0002**	**.0256**	**.0000**	**99.29**	**-.0001**	**-.0001**	**.0005**
Stddev	.0004	.0045	.0005	.0002	.000	.20	.0000	.0001	.0004
%RSD	98.56	18.46	357.0	.7674	332.1	.2043	23.17	60.16	78.02
#1	-.0003	.0298	-.0001	.0259	.0000	99.52	-.0002	-.0001	.0009
#2	.0000	.0211	-.0002	.0256	-.0001	99.23	-.0001	.0000	.0004
#3	-.0008	.0230	.0008	.0255	.0001	99.13	-.0001	-.0002	.0001

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**-.0008**	**2.414**	**16.21**	**3.511**	**.0748**	**.0216**	**12.65**	**.0000**	**.0004**
Stddev	.0005	.006	.02	.006	.0003	.0002	.04	.0001	.0006
%RSD	54.90	.2442	.1251	.1627	.3752	.8262	.2929	252.0	153.3
#1	-.0005	2.414	16.21	3.515	.0750	.0216	12.61	.0001	.0005
#2	-.0014	2.420	16.22	3.514	.0750	.0218	12.69	.0001	.0008
#3	-.0007	2.408	16.18	3.505	.0745	.0215	12.64	-.0001	-.0002

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0019**	**.0036**	**2.419**	**.0006**	**.6555**	**.0010**	**-.0008**	**.0000**	**.0025**
Stddev	.0013	.0020	.011	.0001	.0015	.0001	.0001	.000	.0001
%RSD	71.36	55.57	.4514	11.60	.2308	12.32	9.665	824.6	2.283
#1	.0006	.0028	2.409	.0006	.6547	.0011	-.0008	.0002	.0024
#2	.0018	.0021	2.418	.0006	.6572	.0010	-.0008	.0000	.0025
#3	.0033	.0059	2.431	.0005	.6546	.0009	-.0007	-.0003	.0025

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1768.5**	**3971.3**	**31604.**	**6050.9**
Stddev	2.3	11.2	60.	6.1
%RSD	.12960	.28285	.19117	.10094
#1	1770.4	3981.5	31605.	6044.6
#2	1766.0	3973.1	31663.	6056.8
#3	1769.2	3959.2	31543.	6051.1

Zoom In Zoom Out

Sample Name: FA40645-8A Acquired: 1/27/2017 17:47:26 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0003**	**.0183**	**-.0017**	**.0191**	**.0000**	**71.77**	**-.0002**	**-.0003**	**.0006**
Stddev	.0002	.0057	.0006	.0001	.000	.43	.0000	.0001	.0004
%RSD	66.01	31.11	36.61	.7781	406.6	.5974	7.872	18.78	71.01
#1	-.0004	.0203	-.0012	.0189	.0000	71.28	-.0002	-.0004	.0010
#2	-.0002	.0119	-.0015	.0191	.0000	71.98	-.0002	-.0003	.0003
#3	-.0001	.0228	-.0025	.0192	-.0001	72.06	-.0002	-.0002	.0004

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**-.0007**	**4.916**	**1.822**	**6.211**	**.0499**	**.0146**	**15.30**	**-.0002**	**-.0003**
Stddev	.0002	.038	.042	.027	.0001	.0001	.07	.0001	.0004
%RSD	26.75	.7673	2.326	.4352	.1829	.3543	.4673	50.74	120.3
#1	-.0006	4.873	1.775	6.209	.0500	.0146	15.23	-.0001	-.0007
#2	-.0009	4.929	1.831	6.239	.0500	.0147	15.30	-.0002	-.0004
#3	-.0005	4.945	1.858	6.186	.0498	.0146	15.37	-.0004	.0001

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0017**	**.0003**	**4.288**	**.0010**	**.7383**	**.0009**	**-.0005**	**.0002**	**.0010**
Stddev	.0015	.0015	.014	.0002	.0039	.0001	.0013	.0003	.0001
%RSD	86.73	472.6	.3334	19.90	.5332	9.138	287.9	174.5	9.489
#1	.0000	.0018	4.274	.0008	.7352	.0010	-.0016	.0005	.0011
#2	.0025	-.0012	4.288	.0012	.7370	.0009	-.0008	-.0002	.0009
#3	.0025	.0003	4.303	.0010	.7428	.0008	.0010	.0003	.0009

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1775.2**	**3983.9**	**31689.**	**6155.3**
Stddev	2.1	3.4	34.	39.6
%RSD	.12044	.08493	.10796	.64363
#1	1776.4	3986.1	31717.	6201.1
#2	1772.8	3985.6	31651.	6133.0
#3	1776.6	3980.0	31699.	6131.8

Zoom In Zoom Out

Sample Name: FA40645-11 Acquired: 1/27/2017 17:51:56 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0000**	**.0152**	**.0082**	**.0181**	**-.0001**	**85.88**	**-.0003**	**-.0002**	**.0002**
Stddev	.0002	.0032	.0006	.0001	.0000	.40	.0000	.0000	.0001
%RSD	559.3	21.09	7.189	.7473	84.93	.4610	18.26	20.28	57.19
#1	.0002	.0176	.0076	.0181	-.0001	86.04	-.0002	-.0002	.0004
#2	.0000	.0116	.0088	.0180	.0000	86.17	-.0003	-.0003	.0001
#3	-.0001	.0165	.0083	.0183	-.0001	85.43	-.0003	-.0002	.0002

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**-.0006**	**7.157**	**1.433**	**9.532**	**.0280**	**.0102**	**52.19**	**-.0003**	**-.0006**
Stddev	.0002	.020	.019	.034	.0000	.0000	.08	.0001	.0003
%RSD	33.00	.2836	1.339	.3570	.1604	.0619	.1501	30.30	45.13
#1	-.0008	7.156	1.450	9.529	.0280	.0102	52.24	-.0003	-.0006
#2	-.0007	7.178	1.412	9.567	.0280	.0102	52.23	-.0002	-.0004
#3	-.0004	7.137	1.437	9.499	.0281	.0102	52.10	-.0004	-.0009

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0019**	**.0022**	**5.296**	**.0008**	**1.650**	**.0009**	**-.0021**	**.0002**	**.0008**
Stddev	.0015	.0016	.011	.0002	.003	.0001	.0010	.0001	.0001
%RSD	82.25	72.67	.1973	26.39	.1755	7.085	48.47	31.68	6.408
#1	.0001	.0034	5.284	.0009	1.652	.0009	-.0010	.0002	.0009
#2	.0025	.0004	5.303	.0006	1.652	.0008	-.0026	.0001	.0008
#3	.0030	.0027	5.300	.0010	1.647	.0009	-.0029	.0002	.0008

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1755.0**	**3921.8**	**31587.**	**6235.7**
Stddev	3.4	2.8	76.	25.8
%RSD	.19431	.07187	.24117	.41429
#1	1751.8	3924.6	31624.	6238.9
#2	1758.6	3921.9	31638.	6208.4
#3	1754.5	3919.0	31500.	6259.8

Zoom In Zoom Out

Sample Name: MP31559-MB1 Acquired: 1/27/2017 17:56:25 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0002**	**.0090**	**-.0012**	**.0001**	**.0000**	**.0091**	**-.0001**	**-.0002**	**.0001**
Stddev	.0001	.0040	.0004	.0000	.000	.0015	.0000	.0001	.0003
%RSD	31.64	44.30	31.46	35.33	123.8	16.15	18.04	45.44	383.2
#1	-.0002	.0109	-.0016	.0001	.0000	.0074	-.0001	-.0001	.0002
#2	-.0001	.0044	-.0008	.0001	-.0001	.0100	-.0001	-.0002	.0002
#3	-.0002	.0116	-.0012	.0000	.0000	.0100	-.0001	-.0002	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0008**	**-.0013**	**-.0030**	**.0106**	**.0001**	**-.0003**	**.0465**	**-.0003**	**.0002**
Stddev	.0002	.0018	.0145	.0129	.0000	.0002	.0084	.0001	.0003
%RSD	26.12	143.2	476.4	122.2	42.99	58.13	17.96	47.17	179.4
#1	-.0007	-.0030	.0136	.0052	.0001	-.0003	.0376	-.0003	.0003
#2	-.0011	.0006	-.0123	.0012	.0001	-.0004	.0541	-.0001	-.0002
#3	-.0007	-.0015	-.0105	.0253	.0001	-.0001	.0479	-.0004	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0019**	**.0017**	**.0037**	**.0004**	**.0001**	**-.0001**	**-.0036**	**-.0001**	**.0006**
Stddev	.0010	.0014	.0001	.0005	.0001	.0001	.0013	.0003	.0001
%RSD	52.36	85.70	3.958	139.4	73.53	85.31	35.22	205.4	13.41
#1	.0017	.0004	.0035	-.0002	.0000	-.0001	-.0035	.0001	.0006
#2	.0010	.0014	.0036	.0007	.0002	-.0002	-.0023	-.0001	.0005
#3	.0030	.0032	.0038	.0007	.0001	-.0001	-.0049	-.0004	.0007
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: MP31559-MB1 Acquired: 1/27/2017 17:56:25 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1792.2**	**4088.6**	**31655.**	**6202.1**
Stddev	3.9	12.6	34.	5.7
%RSD	.21868	.30742	.10856	.09178
#1	1787.7	4075.2	31694.	6208.6
#2	1794.2	4100.1	31631.	6198.3
#3	1794.6	4090.4	31639.	6199.3

Zoom In Zoom Out

Sample Name: MP31559-B1 Acquired: 1/27/2017 18:00:59 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0461**	**29.44**	**1.943**	**2.122**	**.0528**	**27.07**	**.0493**	**.4992**	**.2059**
Stddev	.0005	.03	.004	.007	.0001	.08	.0001	.0010	.0007
%RSD	.9963	.1128	.1984	.3499	.2560	.2866	.1760	.1917	.3296
#1	.0458	29.42	1.940	2.120	.0527	26.98	.0493	.4986	.2067
#2	.0466	29.48	1.942	2.116	.0529	27.10	.0493	.4988	.2056
#3	.0458	29.42	1.947	2.130	.0528	27.13	.0492	.5003	.2054
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2531**	**28.77**	**26.29**	**26.43**	**.5105**	**.5292**	**26.32**	**.4959**	**.4879**
Stddev	.0007	.10	.04	.12	.0012	.0016	.03	.0007	.0021
%RSD	.2599	.3345	.1616	.4565	.2325	.3067	.1137	.1337	.4362
#1	.2538	28.69	26.24	26.29	.5117	.5276	26.35	.4953	.4856
#2	.2528	28.88	26.29	26.47	.5104	.5291	26.31	.4957	.4881
#3	.2527	28.75	26.33	26.52	.5093	.5308	26.29	.4966	.4899
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4900**	**1.919**	**.0603**	**.5387**	**.5297**	**.5240**	**1.926**	**.4772**	**.4897**
Stddev	.0042	.006	.0005	.0009	.0013	.0017	.005	.0013	.0012
%RSD	.8664	.2900	.7620	.1715	.2532	.3155	.2526	.2678	.2494
#1	.4877	1.917	.0604	.5393	.5290	.5258	1.921	.4785	.4902
#2	.4875	1.915	.0598	.5392	.5312	.5226	1.931	.4772	.4905
#3	.4949	1.926	.0606	.5376	.5289	.5234	1.927	.4760	.4883
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: MP31559-B1 Acquired: 1/27/2017 18:00:59 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1743.9**	**3999.0**	**31612.**	**6118.9**
Stddev	7.7	22.8	121.	15.1
%RSD	.44190	.57039	.38284	.24638
#1	1748.8	4009.2	31476.	6136.3
#2	1747.8	4015.0	31651.	6109.9
#3	1735.0	3972.9	31708.	6110.5

Zoom In Zoom Out

Sample Name: FA40672-1 Acquired: 1/27/2017 18:05:12 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0000**	**.0145**	**-.0003**	**.0193**	**-.0001**	**42.26**	**-.0001**	**.0000**	**.0005**
Stddev	.0003	.0038	.0005	.0003	.0000	.09	.0000	.0001	.0002
%RSD	764.8	26.27	168.9	1.685	16.73	.2078	23.04	269.0	34.93
#1	.0004	.0106	-.0009	.0194	-.0001	42.15	-.0001	.0000	.0004
#2	-.0001	.0182	-.0001	.0189	-.0001	42.31	-.0001	.0000	.0004
#3	-.0002	.0147	.0001	.0196	-.0001	42.30	-.0001	.0001	.0008

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0001**	**.0170**	**.3800**	**.6644**	**.0191**	**.0007**	F **130.4**	**.0033**	**.0003**
Stddev	.0002	.0022	.0044	.0200	.0000	.0003	.1	.0001	.0006
%RSD	149.0	13.14	1.148	3.003	.2422	35.80	.0723	4.355	234.1
#1	-.0001	.0182	.3801	.6469	.0191	.0009	130.3	.0032	.0004
#2	.0002	.0145	.3844	.6603	.0191	.0008	130.3	.0035	-.0004
#3	.0003	.0184	.3756	.6862	.0192	.0004	130.5	.0033	.0008

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0021**	**.0014**	**.4065**	**.0011**	**.0972**	**.0013**	**-.0016**	**.0001**	**.1414**
Stddev	.0003	.0004	.0019	.0002	.0004	.0001	.0005	.0001	.0003
%RSD	13.64	25.14	.4719	16.48	.3790	4.435	29.46	36.26	.2272
#1	.0018	.0015	.4078	.0009	.0968	.0013	-.0015	.0001	.1413
#2	.0023	.0010	.4043	.0013	.0976	.0013	-.0012	.0002	.1412
#3	.0023	.0018	.4073	.0012	.0973	.0014	-.0021	.0002	.1418

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1752.1**	**3957.6**	**31812.**	**6147.8**
Stddev	3.6	14.5	30.	10.1
%RSD	.20623	.36538	.09497	.16375
#1	1756.2	3958.5	31818.	6159.4
#2	1749.3	3971.5	31839.	6142.3
#3	1750.8	3942.7	31779.	6141.7

Zoom In Zoom Out

Sample Name: MP31559-D1 Acquired: 1/27/2017 18:09:41 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0001**	**.0148**	**-.0002**	**.0194**	**.0000**	**42.77**	**-.0001**	**.0000**	**.0003**
Stddev	.0002	.0047	.0004	.0003	.000	.14	.0000	.0001	.0003
%RSD	185.2	31.78	216.0	1.787	598.9	.3209	36.67	363.6	109.0
#1	-.0002	.0159	-.0006	.0195	-.0001	42.66	-.0001	-.0001	.0001
#2	.0001	.0096	-.0001	.0190	.0000	42.72	-.0001	.0000	.0001
#3	-.0001	.0189	.0001	.0196	.0000	42.92	-.0001	.0002	.0007

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**-.0004**	**.0144**	**.4132**	**.6774**	**.0194**	**.0006**	F **132.1**	**.0034**	**-.0001**
Stddev	.0002	.0050	.0294	.0302	.0000	.0001	.2	.0001	.0004
%RSD	70.06	34.78	7.127	4.465	.2041	20.44	.1457	3.115	722.9
#1	-.0004	.0107	.3979	.6597	.0194	.0008	132.3	.0034	.0001
#2	-.0001	.0202	.3946	.6602	.0195	.0007	132.0	.0033	.0002
#3	-.0006	.0125	.4471	.7123	.0195	.0005	132.0	.0035	-.0005

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0019**	**.0013**	**.4165**	**.0005**	**.0987**	**.0011**	**-.0019**	**.0000**	**.1447**
Stddev	.0007	.0024	.0048	.0002	.0001	.0001	.0009	.000	.0004
%RSD	37.21	190.1	1.142	48.39	.1322	12.90	47.95	2013.	.2746
#1	.0013	.0002	.4209	.0007	.0987	.0011	-.0014	.0000	.1451
#2	.0017	.0041	.4173	.0002	.0989	.0013	-.0014	.0000	.1446
#3	.0027	-.0004	.4114	.0006	.0986	.0010	-.0029	.0001	.1443

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1755.2**	**3948.7**	**31951.**	**6243.2**
Stddev	2.7	5.3	41.	37.6
%RSD	.15588	.13348	.12922	.60182
#1	1756.1	3947.7	31908.	6259.4
#2	1757.3	3944.1	31957.	6270.0
#3	1752.1	3954.5	31990.	6200.2

Zoom In Zoom Out

Sample Name: MP31559-SD1 Acquired: 1/27/2017 18:14:10 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0006**	**.0369**	**-.0025**	**.0190**	**-.0001**	**42.57**	**-.0002**	**-.0002**	**-.0001**
Stddev	.0012	.0204	.0049	.0003	.0000	.12	.0001	.0001	.0016
%RSD	200.6	55.30	197.7	1.554	30.22	.2806	76.06	59.65	2859.
#1	-.0008	.0363	.0032	.0192	-.0001	42.70	-.0001	-.0003	-.0012
#2	.0010	.0575	-.0051	.0187	-.0001	42.54	-.0001	-.0001	-.0008
#3	.0016	.0168	-.0055	.0193	-.0002	42.47	-.0004	-.0003	.0018

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**-.0065**	**-.0003**	**.4592**	**.7847**	**.0194**	**-.0019**	**128.4**	**.0037**	**-.0017**
Stddev	.0015	.0074	.0670	.0633	.0003	.0009	.4	.0002	.0026
%RSD	22.73	2891.	14.59	8.063	1.511	48.82	.3346	5.823	157.9
#1	-.0055	-.0001	.5009	.8111	.0197	-.0015	128.6	.0037	-.0039
#2	-.0059	-.0077	.3819	.8304	.0194	-.0012	128.7	.0035	.0012
#3	-.0082	.0071	.4947	.7125	.0191	-.0029	127.9	.0040	-.0023

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0068**	**-.0054**	**.3973**	**.0024**	**.0960**	**.0013**	**-.0018**	**-.0005**	**.1790**
Stddev	.0036	.0018	.0015	.0019	.0002	.0003	.0126	.0009	.0003
%RSD	52.66	33.33	.3875	79.00	.2007	25.49	692.4	177.8	.1509
#1	.0027	-.0050	.3986	.0021	.0958	.0015	.0058	-.0010	.1789
#2	.0092	-.0074	.3956	.0044	.0961	.0014	-.0163	-.0011	.1793
#3	.0085	-.0039	.3975	.0007	.0961	.0009	.0050	.0005	.1789

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1838.6**	**4159.7**	**32434.**	**6247.3**
Stddev	1.7	2.7	152.	18.7
%RSD	.09334	.06400	.46963	.29925
#1	1840.4	4162.4	32263.	6231.3
#2	1838.5	4159.6	32480.	6267.8
#3	1836.9	4157.1	32557.	6242.7

Zoom In Zoom Out

Sample Name: MP31559-S1 Acquired: 1/27/2017 18:18:42 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0478**	**29.87**	**1.995**	**2.162**	**.0532**	**69.86**	**.0495**	**.5018**	**.2055**
Stddev	.0012	.04	.007	.004	.0003	.09	.0001	.0007	.0006
%RSD	2.448	.1214	.3390	.1952	.5013	.1243	.2143	.1323	.2834
#1	.0491	29.84	1.987	2.167	.0535	69.76	.0494	.5013	.2060
#2	.0476	29.86	2.000	2.159	.0531	69.87	.0496	.5026	.2049
#3	.0468	29.91	1.997	2.160	.0530	69.94	.0494	.5016	.2057

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.2635**	**28.89**	**27.75**	**27.11**	**.5290**	**.5355**	**F 158.8**	**.4997**	**.4931**
Stddev	.0007	.03	.10	.08	.0018	.0005	1.2	.0007	.0010
%RSD	.2661	.1092	.3768	.3105	.3363	.0972	.7279	.1419	.2093
#1	.2636	28.85	27.72	27.02	.5277	.5349	159.6	.4989	.4940
#2	.2641	28.91	27.66	27.12	.5283	.5356	157.4	.5000	.4920
#3	.2628	28.90	27.87	27.19	.5311	.5360	159.2	.5002	.4933

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.5010**	**1.987**	**.4804**	**.5390**	**.6294**	**.5269**	**1.956**	**.4817**	**.6319**
Stddev	.0043	.003	.0031	.0006	.0012	.0005	.008	.0024	.0018
%RSD	.8497	.1545	.6446	.1188	.1921	.0950	.3951	.5064	.2900
#1	.4966	1.985	.4796	.5384	.6305	.5269	1.952	.4789	.6298
#2	.5051	1.985	.4777	.5388	.6281	.5274	1.950	.4834	.6328
#3	.5013	1.991	.4838	.5397	.6297	.5264	1.965	.4827	.6332

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1704.7**	**3935.6**	**31369.**	**6057.8**
Stddev	.6	6.9	25.	10.2
%RSD	.03333	.17512	.08075	.16905
#1	1704.4	3932.0	31373.	6053.5
#2	1704.4	3931.2	31341.	6069.5
#3	1705.4	3943.5	31391.	6050.4

Zoom In Zoom Out

Sample Name: MP31559-S2 Acquired: 1/27/2017 18:23:04 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0472**	**29.44**	**1.986**	**2.156**	**.0528**	**68.70**	**.0494**	**.4993**	**.2011**
Stddev	.0003	.13	.005	.004	.0004	.26	.0000	.0006	.0005
%RSD	.6427	.4330	.2536	.1876	.6865	.3743	.0729	.1119	.2240
#1	.0469	29.58	1.981	2.160	.0531	68.97	.0493	.4992	.2010
#2	.0474	29.33	1.990	2.152	.0524	68.45	.0494	.4999	.2016
#3	.0474	29.42	1.988	2.156	.0529	68.67	.0494	.4988	.2008

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.2596**	**28.45**	**27.50**	**26.50**	**.5237**	**.5336**	**F 156.1**	**.4988**	**.4898**
Stddev	.0008	.10	.10	.19	.0017	.0007	1.7	.0019	.0008
%RSD	.3128	.3461	.3629	.7355	.3280	.1287	1.088	.3768	.1693
#1	.2597	28.56	27.56	26.62	.5248	.5336	155.9	.4969	.4889
#2	.2588	28.36	27.38	26.28	.5247	.5328	154.5	.5007	.4906
#3	.2604	28.45	27.56	26.61	.5218	.5342	157.9	.4987	.4898

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.5003**	**1.990**	**.4815**	**.5355**	**.6221**	**.5170**	**1.944**	**.4769**	**.6294**
Stddev	.0000	.004	.0059	.0005	.0020	.0019	.003	.0013	.0038
%RSD	.0052	.1907	1.226	.0924	.3228	.3664	.1440	.2663	.5987
#1	.5003	1.987	.4872	.5356	.6236	.5184	1.947	.4755	.6252
#2	.5003	1.990	.4754	.5350	.6198	.5176	1.941	.4772	.6325
#3	.5003	1.994	.4820	.5360	.6229	.5148	1.944	.4780	.6304

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1704.2**	**3923.3**	**31652.**	**6151.9**
Stddev	6.2	8.5	117.	25.7
%RSD	.36418	.21601	.36929	.41798
#1	1697.8	3918.8	31556.	6131.2
#2	1704.4	3918.0	31617.	6180.7
#3	1710.2	3933.1	31782.	6143.7

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/27/2017 18:27:25 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2561**	**39.21**	**1.904**	**2.016**	**1.967**	**38.95**	**1.941**	**1.953**	**1.965**
Stddev	.0003	.09	.004	.000	.003	.09	.005	.004	.009
%RSD	.1179	.2297	.2316	.0086	.1581	.2273	.2524	.1928	.4581
#1	.2562	39.11	1.901	2.016	1.964	38.86	1.937	1.951	1.968
#2	.2564	39.29	1.902	2.016	1.969	39.03	1.941	1.952	1.971
#3	.2558	39.22	1.909	2.016	1.969	38.97	1.946	1.958	1.954
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.926**	**39.42**	**38.20**	**38.55**	**1.971**	**2.027**	**38.41**	**1.918**	**1.932**
Stddev	.006	.13	.04	.23	.005	.004	.02	.006	.005
%RSD	.3218	.3359	.0939	.6034	.2614	.2174	.0502	.2999	.2431
#1	1.923	39.27	38.18	38.29	1.975	2.023	38.39	1.915	1.929
#2	1.933	39.47	38.18	38.75	1.972	2.026	38.42	1.914	1.930
#3	1.923	39.52	38.24	38.61	1.965	2.031	38.43	1.925	1.938
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.909**	**1.932**	**2.461**	**2.052**	**2.005**	**1.994**	**1.933**	**2.009**	**1.926**
Stddev	.004	.005	.011	.006	.000	.006	.006	.003	.006
%RSD	.1976	.2429	.4537	.3111	.0211	.2906	.3120	.1248	.2980
#1	1.907	1.927	2.448	2.045	2.005	1.995	1.927	2.010	1.921
#2	1.907	1.934	2.465	2.053	2.005	1.999	1.933	2.010	1.924
#3	1.914	1.936	2.469	2.058	2.006	1.987	1.939	2.006	1.932
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

SGS ACCUTEST FA40657

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/27/2017 18:27:25 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1741.1	4027.7	32066.	6284.2
Stddev	3.6	4.7	90.	33.2
%RSD	.20468	.11667	.28122	.52851
#1	1739.8	4029.1	32057.	6306.3
#2	1745.2	4031.5	31981.	6246.0
#3	1738.4	4022.4	32161.	6300.3

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/27/2017 18:31:37 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0056	.0006	.0003	.0001	.0034	.0000	.0000	.0000
Stddev	.0001	.0028	.0001	.0001	.0000	.0012	.000	.000	.0002
%RSD	250.9	49.71	13.74	24.68	42.73	36.45	76.05	139.8	471.9
#1	-.0001	.0078	.0005	.0003	.0001	.0043	.0000	-.0001	.0000
#2	-.0002	.0025	.0006	.0004	.0001	.0040	.0000	-.0001	.0003
#3	.0001	.0065	.0007	.0003	.0001	.0020	.0000	.0000	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0010	.0070	.0305	.0067	.0001	F .0016	.0656	-.0001	.0004
Stddev	.0002	.0005	.0262	.0078	.0000	.0003	.0063	.0001	.0007
%RSD	23.26	6.930	85.94	115.9	24.23	20.54	9.554	225.1	159.4
#1	-.0008	.0067	.0052	.0009	.0001	.0019	.0694	-.0001	.0009
#2	-.0012	.0067	.0575	.0155	.0001	.0015	.0690	-.0002	.0008
#3	-.0009	.0076	.0287	.0037	.0001	.0013	.0584	.0001	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0017	.0003	.0004	.0002	.0003	.0005	.0000	.0001
Stddev	.0010	.0010	.0006	.0003	.0000	.0000	.0007	.0001	.0000
%RSD	335.3	60.53	213.2	67.65	15.37	7.984	135.9	285.9	41.80
#1	.0015	.0023	.0010	.0007	.0002	.0003	.0000	.0000	.0001
#2	-.0005	.0022	.0000	.0003	.0001	.0003	.0014	-.0001	.0001
#3	.0000	.0005	-.0001	.0002	.0002	.0003	.0003	.0001	.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/27/2017 18:31:37 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1830.5	4169.9	32198.	6305.8
Stddev	2.7	7.5	69.	21.8
%RSD	.14517	.17896	.21492	.34553
#1	1832.5	4163.3	32276.	6331.0
#2	1831.6	4178.0	32172.	6292.9
#3	1827.5	4168.3	32145.	6293.6

Zoom In Zoom Out

Sample Name: MP31559-MB2 Acquired: 1/27/2017 18:36:11 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0029	-.0011	.0000	.0000	.0057	-.0001	-.0001	.0005
Stddev	.0002	.0070	.0008	.0001	.000	.0014	.0001	.0001	.0003
%RSD	204.3	245.6	74.71	227.6	98.44	24.92	69.98	68.02	73.02
#1	.0001	-.0044	-.0002	.0002	.0000	.0067	-.0001	-.0001	.0001
#2	-.0003	.0096	-.0013	-.0001	-.0001	.0041	-.0001	-.0002	.0008
#3	.0000	.0034	-.0018	.0000	.0000	.0062	.0000	.0000	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0010	.0012	.0862	.0382	.0001	.0003	F 168.1	-.0002	.0003
Stddev	.0000	.0027	.0181	.0305	.0001	.0001	.4	.0000	.0003
%RSD	4.084	232.7	21.00	80.04	66.91	41.30	.2091	14.73	79.13
#1	-.0010	-.0006	.1051	.0550	.0001	.0004	168.0	-.0002	.0006
#2	-.0010	-.0001	.0844	.0029	.0000	.0004	167.9	-.0002	.0003
#3	-.0011	.0043	.0690	.0565	.0001	.0002	168.5	-.0002	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							2.500		
Low Limit							-2.500		

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0012	.0015	.0040	.0012	.0001	.0001	-.0027	.0000	.0009
Stddev	.0005	.0006	.0008	.0001	.0000	.0000	.0005	.000	.0001
%RSD	45.30	39.39	20.56	10.11	44.64	17.94	19.03	644.9	9.267
#1	.0006	.0009	.0031	.0011	.0002	.0001	-.0021	-.0001	.0009
#2	.0015	.0021	.0040	.0014	.0001	.0001	-.0031	-.0003	.0009
#3	.0015	.0015	.0048	.0012	.0001	.0001	-.0029	.0003	.0008
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: MP31559-MB2 Acquired: 1/27/2017 18:36:11 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1765.6	3999.0	32036.	6109.1
Stddev	4.4	2.5	30.	19.3
%RSD	.25138	.06283	.09256	.31666
#1	1760.5	3996.3	32049.	6119.9
#2	1768.1	3999.3	32002.	6120.5
#3	1768.3	4001.3	32056.	6086.7

Zoom In Zoom Out

Sample Name: MP31559-B2 Acquired: 1/27/2017 18:40:52 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0476	29.46	2.010	2.139	.0530	27.19	.0500	.5040	.2034
Stddev	.0002	.08	.003	.009	.0002	.03	.0000	.0004	.0004
%RSD	.3685	.2549	.1357	.4167	.2951	.1214	.0660	.0746	.1743
#1	.0478	29.39	2.011	2.132	.0529	27.21	.0500	.5044	.2035
#2	.0477	29.45	2.007	2.137	.0532	27.21	.0500	.5040	.2029
#3	.0474	29.54	2.012	2.149	.0530	27.15	.0499	.5036	.2036
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2583	28.74	27.43	26.26	.5130	.5389	F 196.4	.5030	.4933
Stddev	.0002	.08	.05	.15	.0009	.0006	2.1	.0005	.0003
%RSD	.0797	.2635	.1813	.5834	.1673	.1091	1.061	.1016	.0554
#1	.2584	28.73	27.40	26.42	.5136	.5395	198.6	.5028	.4930
#2	.2581	28.82	27.42	26.24	.5133	.5383	196.2	.5036	.4932
#3	.2585	28.67	27.49	26.12	.5120	.5388	194.4	.5026	.4936
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value							25.00		
Range							20.00%		

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5055	2.019	.0622	.5398	.5332	.5242	1.962	.4833	.5010
Stddev	.0016	.005	.0009	.0012	.0019	.0017	.002	.0007	.0010
%RSD	.3232	.2470	1.421	.2240	.3613	.3301	.0753	.1461	.1944
#1	.5073	2.019	.0623	.5406	.5315	.5252	1.963	.4826	.5006
#2	.5041	2.013	.0630	.5404	.5329	.5252	1.960	.4840	.5021
#3	.5050	2.023	.0612	.5384	.5353	.5222	1.963	.4832	.5003
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: MP31559-B2 Acquired: 1/27/2017 18:40:52 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1703.3	3907.2	31600.	6142.4
Stddev	1.3	4.9	91.	4.3
%RSD	.07696	.12457	.28874	.06930
#1	1703.7	3901.7	31537.	6138.5
#2	1704.4	3910.9	31558.	6141.7
#3	1701.8	3909.0	31705.	6146.9

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/27/2017 19:20:22 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2567	39.37	1.929	2.005	1.984	39.31	1.967	1.964	1.981
Stddev	.0007	.20	.004	.007	.011	.13	.001	.001	.006
%RSD	.2578	.4969	.2043	.3641	.5596	.3254	.0383	.0519	.3134
#1	.2573	39.58	1.925	2.013	1.994	39.44	1.968	1.963	1.974
#2	.2560	39.19	1.929	1.999	1.973	39.18	1.967	1.965	1.987
#3	.2567	39.34	1.933	2.003	1.986	39.32	1.968	1.965	1.981
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.924	39.71	38.58	39.09	1.995	2.030	38.76	1.947	1.954
Stddev	.008	.19	.21	.26	.004	.004	.20	.001	.004
%RSD	.4102	.4666	.5523	.6609	.2162	.1931	.5090	.0583	.2064
#1	1.915	39.87	38.82	39.32	1.995	2.026	38.98	1.946	1.957
#2	1.930	39.51	38.52	38.81	2.000	2.031	38.67	1.948	1.950
#3	1.926	39.76	38.41	39.14	1.991	2.033	38.62	1.947	1.956
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.924	1.947	2.482	2.058	2.032	2.020	1.947	2.029	1.966
Stddev	.004	.010	.006	.003	.012	.008	.009	.006	.004
%RSD	.2027	.5040	.2608	.1208	.5773	.3983	.4639	.2886	.1882
#1	1.922	1.936	2.477	2.057	2.045	2.012	1.941	2.023	1.964
#2	1.929	1.956	2.490	2.056	2.022	2.028	1.943	2.035	1.964
#3	1.922	1.948	2.480	2.061	2.030	2.019	1.957	2.029	1.971
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/27/2017 19:20:22 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1745.2**	**4021.5**	**32047.**	**6242.5**
Stddev	5.4	16.4	183.	26.6
%RSD	.30881	.40764	.56948	.42653
#1	1750.5	4031.1	32146.	6230.3
#2	1739.7	4002.6	31837.	6273.0
#3	1745.3	4030.8	32160.	6224.2

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/27/2017 19:24:35 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0107**	**.0001**	**.0001**	**.0001**	**.0015**	**.0000**	**.0000**	**.0001**
Stddev	.0001	.0100	.0005	.0001	.0000	.0007	.0001	.0001	.0001
%RSD	48.48	93.43	384.9	89.76	19.68	46.75	234.8	1341.	47.34
#1	.0001	.0223	-.0002	.0001	.0001	.0008	.0001	.0000	.0001
#2	.0003	.0042	-.0001	.0003	.0001	.0021	.0000	.0001	.0001
#3	.0002	.0057	.0006	.0001	.0001	.0016	.0000	-.0001	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0007**	**.0054**	**.0116**	**.0139**	**.0002**	**F .0017**	**.0441**	**-.0001**	**.0005**
Stddev	.0001	.0007	.0208	.0051	.0000	.0004	.0013	.0001	.0004
%RSD	16.80	13.04	178.6	36.76	24.31	24.77	2.974	133.3	79.72
#1	-.0006	.0060	-.0113	.0122	.0002	.0021	.0448	.0000	.0009
#2	-.0006	.0046	.0169	.0196	.0001	.0017	.0426	.0000	.0007
#3	-.0008	.0056	.0293	.0098	.0001	.0013	.0449	-.0002	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0017**	**F .0023**	**.0009**	**.0007**	**.0002**	**.0002**	**.0011**	**.0002**	**.0001**
Stddev	.0007	.0015	.0004	.0002	.0000	.0001	.0011	.0002	.0001
%RSD	39.53	64.55	40.82	34.36	28.48	41.42	97.27	116.8	146.8
#1	.0023	.0006	.0011	.0004	.0002	.0003	.0024	.0000	.0001
#2	.0017	.0031	.0012	.0008	.0002	.0003	.0007	.0002	.0001
#3	.0010	.0031	.0005	.0009	.0001	.0001	.0003	.0004	.0000
Check ?	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.0020							
Low Limit		-.0020							

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/27/2017 19:24:35 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1836.2**	**4113.5**	**32419.**	**6393.8**
Stddev	3.4	10.5	107.	3.2
%RSD	.18341	.25570	.32901	.05052
#1	1835.5	4105.7	32515.	6396.9
#2	1839.9	4125.4	32304.	6394.1
#3	1833.3	4109.2	32438.	6390.5

Zoom In Zoom Out

Sample Name: CRIA Acquired: 1/27/2017 20:10:48 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**.0086**	**.2118**	**.0104**	**.2143**	**.0053**	**1.092**	**.0054**	**.0529**	**.0106**
Stddev	.0002	.0096	.0001	.0007	.0001	.011	.0001	.0002	.0002
%RSD	2.227	4.551	1.177	.3058	2.040	.9789	1.034	.4259	2.071
#1	.0088	.2009	.0103	.2144	.0053	1.084	.0054	.0530	.0109
#2	.0086	.2191	.0105	.2136	.0052	1.088	.0054	.0529	.0105
#3	.0084	.2154	.0105	.2148	.0054	1.104	.0053	.0526	.0105

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.0242**	**.3232**	**10.47**	**5.375**	**.0166**	**.0509**	**10.56**	**.0429**	**.0051**
Stddev	.0005	.0022	.04	.041	.0001	.0001	.03	.0002	.0007
%RSD	2.007	.6875	.4052	.7598	.3045	.1551	.2431	.5376	13.73
#1	.0244	.3206	10.47	5.398	.0166	.0510	10.56	.0431	.0059
#2	.0236	.3241	10.43	5.399	.0166	.0509	10.53	.0427	.0048
#3	.0245	.3248	10.52	5.328	.0165	.0509	10.58	.0430	.0046

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0056**	**.0108**	**.0396**	**.0526**	**.0104**	**.0102**	**.0100**	**.0500**	**.0223**
Stddev	.0006	.0009	.0005	.0005	.0001	.0000	.0002	.0002	.0002
%RSD	11.51	8.083	1.230	.8907	.7903	.3772	1.642	.4233	.7233
#1	.0059	.0102	.0392	.0521	.0104	.0102	.0101	.0501	.0221
#2	.0061	.0105	.0394	.0531	.0103	.0102	.0098	.0498	.0222
#3	.0049	.0118	.0401	.0527	.0105	.0102	.0101	.0501	.0224

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1847.0**	**4096.6**	**32619.**	**6317.6**
Stddev	4.1	11.2	139.	4.5
%RSD	.22194	.27290	.42713	.07143
#1	1851.2	4109.5	32468.	6321.8
#2	1846.9	4090.7	32742.	6318.0
#3	1843.0	4089.6	32647.	6312.8

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/27/2017 20:15:17 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2557**	**38.81**	**1.942**	**1.960**	**1.982**	**39.47**	**1.981**	**1.964**	**2.003**
Stddev	.0005	.04	.004	.004	.004	.07	.004	.003	.006
%RSD	.2072	.1068	.1922	.2270	.1960	.1833	.2048	.1401	.2848
#1	.2562	38.86	1.941	1.964	1.984	39.39	1.986	1.967	2.008
#2	.2559	38.81	1.946	1.961	1.978	39.49	1.980	1.963	2.004
#3	.2551	38.78	1.939	1.955	1.985	39.53	1.978	1.962	1.997
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.913**	**39.42**	**38.77**	**39.47**	**2.022**	**2.020**	**38.25**	**1.964**	**1.958**
Stddev	.005	.04	.05	.08	.004	.001	.09	.006	.004
%RSD	.2440	.0925	.1187	.1992	.1733	.0603	.2277	.3018	.1832
#1	1.909	39.42	38.82	39.47	2.023	2.021	38.35	1.970	1.961
#2	1.918	39.38	38.73	39.39	2.018	2.019	38.18	1.961	1.957
#3	1.911	39.45	38.76	39.55	2.025	2.021	38.23	1.960	1.954
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.933**	**1.947**	**2.486**	**2.052**	**2.031**	**2.053**	**1.950**	**2.061**	**2.001**
Stddev	.003	.005	.003	.003	.005	.004	.004	.004	.008
%RSD	.1528	.2359	.1158	.1443	.2571	.1742	.1966	.1776	.3877
#1	1.936	1.950	2.489	2.055	2.037	2.052	1.954	2.058	2.009
#2	1.931	1.942	2.486	2.049	2.028	2.057	1.947	2.059	2.000
#3	1.932	1.949	2.483	2.051	2.028	2.050	1.949	2.065	1.993
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/27/2017 20:15:17 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1738.3**	**3984.3**	**31528.**	**6131.4**
Stddev	1.7	3.8	100.	8.9
%RSD	.09824	.09461	.31747	.14560
#1	1738.0	3980.2	31618.	6137.2
#2	1740.1	3987.5	31546.	6121.1
#3	1736.7	3985.2	31420.	6135.8

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/27/2017 20:19:31 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0026**	**-.0008**	**-.0001**	**.0001**	**.0029**	**.0000**	**.0000**	**.0000**
Stddev	.0001	.0018	.0008	.0002	.0000	.0029	.000	.0001	.0001
%RSD	51.81	70.32	105.9	229.2	43.53	102.6	630.0	164.7	353.5
#1	.0004	.0014	.0001	-.0002	.0001	.0041	.0000	.0000	.0000
#2	.0001	.0017	-.0008	.0001	.0000	.0050	.0000	.0001	-.0001
#3	.0003	.0047	-.0016	-.0001	.0001	-.0005	.0000	.0000	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0004**	**.0078**	**.0595**	**-.0009**	**.0001**	F **.0018**	**.2208**	**.0000**	**-.0001**
Stddev	.0003	.0010	.0354	.0284	.0000	.0005	.0011	.0001	.0009
%RSD	79.58	12.86	59.53	3252.	36.83	27.74	.4794	216.7	1450.
#1	-.0002	.0087	.0937	-.0232	.0001	.0023	.2210	.0000	.0008
#2	-.0007	.0067	.0230	-.0105	.0001	.0016	.2218	.0000	-.0001
#3	-.0002	.0079	.0619	.0311	.0000	.0014	.2197	.0001	-.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0013**	**.0013**	**.0001**	**.0007**	**.0000**	**.0002**	**.0000**	**.0002**	**.0000**
Stddev	.0008	.0017	.0003	.0003	.0001	.0001	.002	.0004	.0001
%RSD	64.07	136.3	219.7	40.80	112.2	60.55	10570.	207.5	3669.
#1	.0021	.0032	.0001	.0009	.0001	.0003	-.0014	-.0001	.0000
#2	.0005	-.0001	.0004	.0004	.0000	.0002	-.0001	.0007	.0000
#3	.0012	.0007	-.0001	.0008	.0000	.0001	.0015	.0000	.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/27/2017 20:19:31 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1821.1**	**4101.1**	**31942.**	**6180.7**
Stddev	3.7	11.0	85.	31.1
%RSD	.20511	.26939	.26470	.50290
#1	1821.4	4104.6	31932.	6150.6
#2	1824.6	4110.0	32031.	6212.7
#3	1817.2	4088.8	31863.	6178.9

Zoom In Zoom Out

Sample Name: ICSA Acquired: 1/27/2017 20:24:04 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	**-.0001**	**499.0**	**.0001**	**.0000**	**-.0001**	**474.4**	**-.0005**	**.0006**	**.0005**
Stddev	.0003	.9	.0010	.0004	.0001	1.2	.0001	.0001	.0005
%RSD	215.2	.1780	810.3	1330.	71.22	.2597	15.65	15.86	100.9
#1	-.0005	499.5	-.0010	-.0004	-.0001	473.1	-.0006	.0005	.0002
#2	.0002	498.0	.0007	.0001	.0000	475.5	-.0004	.0007	.0011
#3	-.0001	499.5	.0007	.0003	-.0001	474.7	-.0005	.0007	.0003

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**-.0013**	**183.9**	**.1879**	F **526.4**	**-.0003**	**.0022**	**.5824**	**.0002**	**.0024**
Stddev	.0002	.6	.0015	2.0	.0000	.0006	.0056	.0003	.0024
%RSD	16.31	.3102	.8150	.3791	6.875	28.03	.9530	130.2	98.51
#1	-.0011	183.5	.1896	525.2	-.0003	.0026	.5762	.0002	.0049
#2	-.0014	184.6	.1873	528.7	-.0003	.0024	.5843	.0000	.0002
#3	-.0015	183.7	.1867	525.4	-.0003	.0015	.5868	.0005	.0021

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**.0039**	**.0006**	**.0247**	**.0047**	**-.0002**	**.0002**	**.0011**	**-.0005**	**-.0023**
Stddev	.0011	.0030	.0017	.0007	.0001	.0001	.0019	.0002	.0002
%RSD	27.13	496.9	6.711	14.60	69.15	40.15	174.1	44.99	10.38
#1	.0039	-.0007	.0239	.0050	-.0001	.0001	.0029	-.0007	-.0024
#2	.0050	.0040	.0266	.0052	-.0003	.0002	.0012	-.0005	-.0020
#3	.0029	-.0015	.0235	.0039	-.0001	.0002	-.0009	-.0003	-.0024

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1568.5**	**3667.4**	**29768.**	**5891.8**
Stddev	2.6	10.7	34.	23.5
%RSD	.16691	.29167	.11316	.39816
#1	1565.7	3678.5	29771.	5910.7
#2	1568.9	3666.7	29733.	5865.6
#3	1570.9	3657.1	29800.	5899.2

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 1/27/2017 20:28:43 Type: Unk
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	F **.9870**	F **508.3**	**1.123**	**.5248**	**.5010**	**483.7**	**.9630**	**.4915**	**.5057**
Stddev	.0025	3.7	.002	.0016	.0019	2.3	.0018	.0009	.0018
%RSD	.2507	.7279	.1900	.3030	.3882	.4839	.1921	.1929	.3652
#1	.9892	505.6	1.120	.5261	.5022	481.0	.9609	.4904	.5078
#2	.9876	512.5	1.124	.5253	.5021	485.1	.9638	.4922	.5044
#3	.9843	506.9	1.124	.5231	.4988	485.0	.9644	.4919	.5050

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	**.5483**	**182.4**	**.1534**	F **521.6**	**.5070**	**.9960**	**.5620**	**.9788**	**.9883**
Stddev	.0021	.3	.0107	.1	.0009	.0026	.0102	.0033	.0025
%RSD	.3815	.1638	6.968	.0117	.1678	.2653	1.813	.3422	.2508
#1	.5459	182.6	.1624	521.7	.5079	.9938	.5587	.9750	.9876
#2	.5494	182.4	.1416	521.5	.5063	.9952	.5735	.9807	.9863
#3	.5497	182.0	.1562	521.6	.5067	.9989	.5539	.9808	.9911

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	**1.080**	**1.054**	**.1241**	**.9995**	**1.032**	**1.023**	**1.015**	**.4781**	**.9502**
Stddev	.006	.004	.0008	.0011	.004	.002	.005	.0019	.0031
%RSD	.5543	.3970	.6282	.1076	.3657	.1470	.5359	.3956	.3281
#1	1.073	1.049	.1234	.9984	1.036	1.024	1.009	.4803	.9467
#2	1.083	1.056	.1239	.9996	1.031	1.023	1.017	.4770	.9515
#3	1.085	1.057	.1249	1.001	1.028	1.021	1.019	.4770	.9524

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	**1549.3**	**3653.0**	**29815.**	**5907.6**
Stddev	2.2	2.7	78.	3.5
%RSD	.14137	.07515	.26327	.05963
#1	1551.8	3656.1	29905.	5911.4
#2	1548.5	3651.5	29772.	5906.7
#3	1547.6	3651.3	29767.	5904.6

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/27/2017 20:33:15 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2555**	**38.96**	**1.954**	**1.994**	**1.976**	**39.30**	**1.987**	**1.977**	**1.974**
Stddev	.0003	.09	.002	.005	.009	.20	.004	.003	.006
%RSD	.0994	.2205	.1178	.2548	.4653	.5032	.1848	.1316	.3167
#1	.2558	39.02	1.955	1.999	1.984	39.43	1.987	1.978	1.980
#2	.2553	38.86	1.951	1.989	1.966	39.07	1.984	1.974	1.968
#3	.2555	39.00	1.955	1.995	1.978	39.40	1.991	1.978	1.973
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.910**	**39.27**	**38.82**	**38.86**	**2.009**	**2.046**	**38.55**	**1.975**	**1.955**
Stddev	.007	.16	.07	.36	.006	.002	.08	.003	.005
%RSD	.3814	.4154	.1838	.9347	.3015	.0951	.2022	.1701	.2610
#1	1.902	39.39	38.89	38.91	2.016	2.045	38.61	1.973	1.953
#2	1.916	39.09	38.82	38.48	2.005	2.048	38.46	1.973	1.952
#3	1.913	39.34	38.75	39.20	2.007	2.045	38.56	1.979	1.961
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.955**	**1.969**	**2.516**	**2.061**	**2.037**	**2.023**	**1.954**	**2.047**	**1.994**
Stddev	.002	.002	.004	.005	.008	.002	.011	.003	.004
%RSD	.0910	.1159	.1422	.2632	.3977	.1191	.5590	.1685	.2124
#1	1.955	1.966	2.515	2.060	2.043	2.025	1.947	2.050	1.996
#2	1.953	1.970	2.513	2.055	2.028	2.024	1.949	2.043	1.989
#3	1.957	1.970	2.520	2.066	2.040	2.021	1.967	2.046	1.997
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/27/2017 20:33:15 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1739.5**	**3965.4**	**31953.**	**6217.6**
Stddev	3.9	5.1	85.	40.2
%RSD	.22626	.12882	.26750	.64703
#1	1741.1	3966.2	32006.	6179.3
#2	1742.3	3970.0	31998.	6259.5
#3	1735.0	3959.9	31854.	6213.9

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/27/2017 20:37:27 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0077**	**.0000**	**.0000**	**.0001**	**.0079**	**.0000**	**-.0001**	**.0000**
Stddev	.0002	.0086	.0010	.0001	.0000	.0007	.000	.0001	.0002
%RSD	71.92	111.6	3207.	970.4	25.31	8.322	1059.	92.28	424.1
#1	.0003	-.0007	-.0006	.0002	.0001	.0084	.0001	.0000	.0002
#2	.0000	.0074	-.0004	-.0001	.0001	.0072	.0000	-.0001	.0000
#3	.0004	.0165	.0011	.0000	.0001	.0081	-.0001	-.0002	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0002**	**.0079**	**.0155**	**.0164**	**.0001**	F **.0016**	**.1680**	**.0000**	**-.0002**
Stddev	.0003	.0025	.0162	.0080	.0000	.0004	.0081	.000	.0004
%RSD	204.7	31.11	104.6	49.05	15.91	22.89	4.798	235.4	201.9
#1	.0001	.0070	.0183	.0144	.0001	.0021	.1754	-.0001	-.0003
#2	.0000	.0107	.0302	.0252	.0001	.0016	.1693	.0001	.0003
#3	-.0005	.0060	-.0019	.0095	.0001	.0013	.1594	-.0001	-.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0014**	**.0004**	**.0001**	**.0004**	**.0001**	**.0002**	**.0004**	**.0002**	**.0000**
Stddev	.0003	.0014	.0008	.0004	.0000	.0001	.0018	.0002	.0001
%RSD	22.92	345.0	691.6	103.5	34.00	22.87	493.5	87.72	130.1
#1	.0013	.0019	.0010	.0002	.0001	.0002	-.0017	.0000	.0000
#2	.0017	-.0008	-.0006	.0009	.0001	.0002	.0012	.0003	.0000
#3	.0011	.0001	-.0001	.0001	.0001	.0003	.0016	.0004	.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/27/2017 20:37:27 Type: QC
Method: 60102007_042011(v436) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1831.6**	**4119.7**	**32208.**	**6251.7**
Stddev	3.2	3.1	67.	13.8
%RSD	.17509	.07404	.20953	.22092
#1	1833.2	4116.6	32263.	6265.9
#2	1833.7	4122.7	32132.	6250.8
#3	1827.9	4119.9	32229.	6238.3

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Ag 328.068 {103}	☒	2	V	-0.005817	0.000000	No
			Fe	0.000009	0.000000	No
Al 396.152 { 85}	☒	1	Mo	0.040330	0.000000	No
As 189.042 {478}	☒	4	Fe	-0.000070	0.000000	No
			Cr	-0.000653	0.000000	No
			Mo	0.000444	0.000000	No
			Al	0.000001	0.000000	No
Ba 455.403 { 74}	☒	1	Fe	0.000016	0.000000	No
Be 313.042 {108}	☒	2	V	0.000625	0.000000	No
			Ti	-0.000289	0.000000	No
Ca 317.933 {106}	☒	None				
Cd 226.502 {449}	☒	4	Fe	0.000072	0.000000	No
			Ca	-0.000000	0.000000	No
			Al	-0.000002	0.000000	No
			Ti	0.000103	0.000000	No
Co 228.616 {447}	☒	3	Mo	-0.001220	0.000000	No
			Ti	0.002210	0.000000	No
			Fe	0.000005	0.000000	No
Cr 267.716 {126}	☒	4	Al	0.000005	0.000000	No
			Fe	-0.000005	0.000000	No
			Ca	0.000002	0.000000	No
			Cd	-0.000120	0.000000	No
Cu 324.754 {104}	☒	10	Mo	0.000189	0.000000	No
			Sn	-0.000012	0.000000	No
			V	-0.000158	0.000000	No
			Al	0.000003	0.000000	No
			Mg	0.000003	0.000000	No
			Co	-0.000547	0.000000	No
			Cd	0.000190	0.000000	No
			Fe	-0.000122	0.000000	No
			Ca	0.000001	0.000000	No
			Ti	-0.000268	0.000000	No
Fe 259.940 {130}	☒	None				
In 230.606 {446}*	☒	None				
K 766.490 { 44}	☒	None				
Mg 279.079 {121}	☒	None				
Mn 257.610 {131}	☒	2	Fe	0.000006	0.000000	No
			Mg	0.000000	0.000000	No
Mo 202.030 {467}	☒	1	Fe	-0.000006	0.000000	No
Na 589.592 { 57}	☒	None				
Ni 231.604 {445}	☒	7	Fe	-0.000035	0.000000	No
			Co	0.000112	0.000000	No
			Mo	0.000980	0.000000	No
			Sb	-0.000120	0.000000	No
			Al	0.000003	0.000000	No
			Be	-0.000304	0.000000	No
			Tl	0.000172	0.000000	No
Pb 220.353 {453}	☒	8	Al	0.000178	0.000000	No
			Fe	0.000156	0.000000	No
			Mo	-0.002189	0.000000	No
			Cu	0.000467	0.000000	No
			Ti	0.000036	0.000000	No
			Si	0.000232	0.000000	No
			Ca	-0.000005	0.000000	No
			Cr	-0.000260	0.000000	No
Sb 206.833 {463}	☒	11	Fe	0.000018	0.000000	No
			Cr	0.011486	0.000000	No

	Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
				Mo	-0.003944	0.000000	No
				V	-0.000441	0.000000	No
				Sn	-0.008695	0.000000	No
				Ti	0.000278	0.000000	No
				Ca	0.000001	0.000000	No
				Ni	-0.000818	0.000000	No
				Al	0.000010	0.000000	No
				Mn	-0.000133	0.000000	No
				Mg	-0.000002	0.000000	No
	Se 196.090 {472}	☒	12	Fe	0.000110	0.000000	No
				Ca	-0.000003	0.000000	No
				Mn	0.000331	0.000000	No
				Mo	0.000111	0.000000	No
				Al	-0.000031	0.000000	No
				V	0.000000	0.000000	No
				Zn	0.000000	0.000000	No
				Sr	-0.000111	0.000000	No
				As	0.000125	0.000000	No
				Cd	-0.000250	0.000000	No
				Mg	-0.000004	0.000000	No
				Cr	-0.000326	0.000000	No
	Si 212.412 {459}	☒	1	Mo	0.000000	0.000000	No
	Sn 189.989 {477}	☒	None				
	Sr 407.771 { 83}	☒	1	Ca	0.000099	0.000000	No
	Ti 334.941 {101}	☒	1	Ca	-0.000011	0.000000	No
	Tl 190.856 {477}	☒	10	Co	0.004099	0.000000	No
				Fe	-0.000007	0.000000	No
				Al	-0.000005	0.000000	No
				Ba	-0.000051	0.000000	No
				Ti	-0.000648	0.000000	No
				Sb	0.000167	0.000000	No
				Ca	-0.000004	0.000000	No
				Cr	0.000340	0.000000	No
				Mg	-0.000002	0.000000	No
				V	0.000015	0.000000	No
	V 292.402 {115}	☒	5	Fe	0.000015	0.000000	No
				Cr	-0.003634	0.000000	No
				Mo	-0.009536	0.000000	No
				Ti	0.000303	0.000000	No
				Mn	-0.000333	0.000000	No
	Y 224.306 {450}*	☒	None				
	Y 360.073 { 94}*	☒	None				
	Y 371.030 { 91}*	☒	None				
	Zn 206.200 {463}	☒	5	Cr	-0.001305	0.000000	No
				Al	0.000011	0.000000	No
				Ca	0.000003	0.000000	No
				Fe	-0.000010	0.000000	No
				As	0.001105	0.000000	No

Element, Wavelength and Order	Date of Fit	Date of Cal.	Type of Fit	Weighting	A0	A1	A2	n (Exponent)
Ag 328.068 {103}	1/27/2017 8:03:59	1/27/2017 8:03:59	Linear	1/Conc	0.000328	0.686889	0.000000	1.000000
Al 396.152 { 85}	1/27/2017 8:03:59	1/27/2017 8:03:59	Linear	1/Conc	0.002001	0.149021	0.000000	1.000000
As 189.042 {478}	1/27/2017 8:03:59	1/27/2017 8:03:59	Linear	1/Conc	-0.001105	0.200131	0.000000	1.000000
Ba 455.403 { 74}	1/27/2017 8:03:59	1/27/2017 8:03:59	Linear	1/Conc	-0.000040	7.862555	0.000000	1.000000
Be 313.042 {108}	1/27/2017 8:03:59	1/27/2017 8:03:59	Linear	1/Conc	0.000316	9.212122	0.000000	1.000000
Ca 317.933 {106}	1/27/2017 8:03:59	1/27/2017 8:03:59	Linear	1/Conc	0.003576	0.228396	0.000000	1.000000
Cd 226.502 {449}	1/27/2017 8:03:59	1/27/2017 8:03:59	Linear	1/Conc	-0.001351	4.845815	0.000000	1.000000
Co 228.616 {447}	1/27/2017 8:03:59	1/27/2017 8:03:59	Linear	1/Conc	-0.000790	2.724535	0.000000	1.000000
Cr 267.716 {126}	1/27/2017 8:03:59	1/27/2017 8:03:59	Linear	1/Conc	-0.000054	0.453736	0.000000	1.000000
Cu 324.754 {104}	1/27/2017 8:03:59	1/27/2017 8:03:59	Linear	1/Conc	0.018034	0.841609	0.000000	1.000000
Fe 259.940 {130}	1/27/2017 8:03:59	1/27/2017 8:03:59	Linear	1/Conc	0.001585	0.139341	0.000000	1.000000
In 230.606 {446}*	1/27/2017 7:46:37	5/5/2010 12:30:54	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
K 766.490 { 44}	1/27/2017 8:03:59	1/27/2017 8:03:59	Linear	1/Conc	0.006606	0.082296	0.000000	1.000000
Mg 279.079 {121}	1/27/2017 8:03:59	1/27/2017 8:03:59	Linear	1/Conc	-0.000330	0.018940	0.000000	1.000000
Mn 257.610 {131}	1/27/2017 8:03:59	1/27/2017 8:03:59	Linear	1/Conc	0.000856	2.631420	0.000000	1.000000
Mo 202.030 {467}	1/27/2017 8:03:59	1/27/2017 8:03:59	Linear	1/Conc	0.002950	0.987554	0.000000	1.000000
Na 589.592 { 57}	1/27/2017 8:03:59	1/27/2017 8:03:59	Linear	1/Conc	0.006301	0.330545	0.000000	1.000000
Ni 231.604 {445}	1/27/2017 8:03:59	1/27/2017 8:03:59	Linear	1/Conc	-0.000720	1.663700	0.000000	1.000000
Pb 220.353 {453}	1/27/2017 8:03:59	1/27/2017 8:03:59	Linear	1/Conc	-0.001366	0.914401	0.000000	1.000000
Sb 206.833 {463}	1/27/2017 8:03:59	1/27/2017 8:03:59	Linear	1/Conc	0.000543	0.263397	0.000000	1.000000
Se 196.090 {472}	1/27/2017 8:03:59	1/27/2017 8:03:59	Linear	1/Conc	0.000621	0.146048	0.000000	1.000000
Si 212.412 {459}	1/27/2017 8:03:59	1/27/2017 8:03:59	Linear	1/Conc	0.006879	0.387150	0.000000	1.000000
Sn 189.989 {477}	1/27/2017 8:03:59	1/27/2017 8:03:59	Linear	1/Conc	0.000837	0.404799	0.000000	1.000000
Sr 407.771 { 83}	1/27/2017 8:03:59	1/27/2017 8:03:59	Linear	1/Conc	0.000399	13.634545	0.000000	1.000000
Ti 334.941 {101}	1/27/2017 8:03:59	1/27/2017 8:03:59	Linear	1/Conc	0.001468	1.640936	0.000000	1.000000
Tl 190.856 {477}	1/27/2017 8:03:59	1/27/2017 8:03:59	Linear	1/Conc	-0.002236	0.302149	0.000000	1.000000
V 292.402 {115}	1/27/2017 8:03:59	1/27/2017 8:03:59	Linear	1/Conc	-0.001209	0.718453	0.000000	1.000000
Y 224.306 {450}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 360.073 { 94}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 371.030 { 91}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Zn 206.200 {463}	1/27/2017 8:03:59	1/27/2017 8:03:59	Linear	1/Conc	0.001524	2.267720	0.000000	1.000000

	Element, Wavelength and Order	Correlation	Std Error of Est	Predicted MDL	Predicted MQL	Status	Reslope		QC Norm	
							Slope	Y-int	Slope factor	Offset
	Ag 328.068 {103}	0.999609	0.000185	0.000365	0.001217	OK.	1.000000	0.000000	1	0
	Al 396.152 { 85}	0.999852	0.004134	0.007705	0.025685	OK.	1.000000	0.000000	1	0
	As 189.042 {478}	0.999976	0.000110	0.000875	0.002915	OK.	1.000000	0.000000	1	0
	Ba 455.403 { 74}	0.999981	0.003932	0.000185	0.000615	OK.	1.000000	0.000000	1	0
	Be 313.042 {108}	0.999895	0.010779	0.000054	0.000180	OK.	1.000000	0.000000	1	0
	Ca 317.933 {106}	0.999816	0.007054	0.002592	0.008640	OK.	1.000000	0.000000	1	0
	Cd 226.502 {449}	0.999941	0.004241	0.000055	0.000182	OK.	1.000000	0.000000	1	0
	Co 228.616 {447}	0.999978	0.001465	0.000108	0.000360	OK.	1.000000	0.000000	1	0
	Cr 267.716 {126}	0.999879	0.000568	0.000325	0.001083	OK.	1.000000	0.000000	1	0
	Cu 324.754 {104}	0.999879	0.001053	0.000260	0.000867	OK.	1.000000	0.000000	1	0
	Fe 259.940 {130}	0.999936	0.002549	0.002075	0.006918	OK.	1.000000	0.000000	1	0
	In 230.606 {446}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	K 766.490 { 44}	0.999851	0.002286	0.024225	0.080748	OK.	1.000000	0.000000	1	0
	Mg 279.079 {121}	0.999859	0.000512	0.019646	0.065487	OK.	1.000000	0.000000	1	0
	Mn 257.610 {131}	0.999822	0.004004	0.000051	0.000168	OK.	1.000000	0.000000	1	0
	Mo 202.030 {467}	0.999795	0.001609	0.000170	0.000567	OK.	1.000000	0.000000	1	0
	Na 589.592 { 57}	0.999877	0.008338	0.006086	0.020286	OK.	1.000000	0.000000	1	0
	Ni 231.604 {445}	0.999966	0.001099	0.000180	0.000601	OK.	1.000000	0.000000	1	0
	Pb 220.353 {453}	0.999955	0.000702	0.000743	0.002477	OK.	1.000000	0.000000	1	0
	Sb 206.833 {463}	0.999954	0.000204	0.001021	0.003404	OK.	1.000000	0.000000	1	0
	Se 196.090 {472}	0.999990	0.000053	0.001660	0.005534	OK.	1.000000	0.000000	1	0
	Si 212.412 {459}	0.983934	0.005658	0.000497	0.001657	OK.	1.000000	0.000000	1	0
	Sn 189.989 {477}	0.999667	0.000841	0.000369	0.001232	OK.	1.000000	0.000000	1	0
	Sr 407.771 { 83}	0.999701	0.026916	0.000068	0.000227	OK.	1.000000	0.000000	1	0
	Ti 334.941 {101}	0.999675	0.003370	0.000129	0.000431	OK.	1.000000	0.000000	1	0
	Tl 190.856 {477}	0.999930	0.000288	0.001335	0.004450	OK.	1.000000	0.000000	1	0
	V 292.402 {115}	0.999680	0.001446	0.000277	0.000922	OK.	1.000000	0.000000	1	0
	Y 224.306 {450}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Y 360.073 { 94}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Y 371.030 { 91}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Zn 206.200 {463}	0.999913	0.002405	0.000086	0.000286	OK.	1.000000	0.000000	1	0

DOD + (MS)

SGS Accutest - Orlando Metals Digestion Log Soil

MP #: 31553 Method of Digestion: SW846-3050B

Prep Date/Time (mm/dd/yy 24:00): 01/26/17; 09:50
HotBlock I.D. ★ AD 5
Thermometer I.D. 204
Correction Factor (°C) -1
Temperature Observed/Corrected (°C) 93/92
Balance I.D. ADVPR03

Spk. Sol. [A]	Volume Used(ml)	Pipette #
ACC979	0.50	10
ACC949	0.25	10
Met5627	0.25	10

Filter Lot#: 1602170411
Dig. Tube Lot# 16D05323

Added [B]:	H_2O_2	HNO_3	HCL	PTFE Boiling Chips
Lot#	1641167	0000133393	0000132880	★ 5941-6I019

Sample #	D	Wt., g	Final Volume(ml)	Comments
Method Blank(MB)		1.6	50.0	
Spike Blank(SB)		↓	↓	
Matrix Spike(MS)		1.18		
Matrix Spike Dup(MSD)		1.30		
Duplicate(DUP)		1.00		
1 QC [C] FA40657-1	1	1.55		
2 FA39850-25T		1.04		
3 -35T		1.11		
4 -38T		1.24		
5 -44T		1.01		
6 FA40602-1		1.21		
7 FA40691-1		1.51		
8 -2		1.19		
9 -3		1.60		
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21 [E]				
22 [E]				
23 [E]				
24 [E]				

CP 01/26/17

Analyst: [redacted] Date: 01/26/17

QC Review: Date: 1.26.17

A Used for SB, MS, MSD
B For reagent volumes used consult SOP MET 104, current revision
C Parent sample used to prepare MS, MSD, DUP
D Bottle Number
E Additional Matrix QC

icpsoildigestionlog 0316.xls Rev 03/04/16 DM

★ CP 01/26/17

SGS ACCUTEST FA40657

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Percent Solids Raw Data Summary

Percent Solids Raw Data Summary

Job Number: FA40657
Account: ARCTXEL Arcadis-US, Inc
Project: Castner Firing Range; Ft Bliss, TX

Sample: FA40657-1 **Analyzed:** 26-JAN-17 by JL **Method:** SM19 2540G
ClientID: FTBL-SED-064-0-6-011817-QA

Wet Weight (Total)	11.48	g
Tare Weight	2.57	g
Dry Weight (Total)	10.24	g
Solids, Percent	86.1	%

LABORATORY DATA CONSULTANTS, INC.
2701 Loker Ave. West, Suite 220, Carlsbad, CA 92010 Bus: 760-827-1100 Fax: 760-827-1099

ARCADIS U.S., Inc.
401 E. Main Street, Suite 400
El Paso, TX 79901

March 7, 2017

SUBJECT: Fort Bliss, Castner Range, Data Validation

Enclosed is the final validation report for the fraction listed below. This SDG was received on February 1, 2017. Attachment 1 is a summary of the samples that were reviewed for each analysis.

LDC Project #38019:

SDG #	**Fraction:**
FA40657	Metals

The data validation was performed under Level III guidelines. The analyses were validated using the following documents, as applicable to each method:

- Final Quality Assurance Project Plan, Military Munitions Response Program Remedial Investigation, Closed Castner Firing Range, Fort Bliss, El Paso, Texas, February 2015
- U.S. Department of Defense Quality Systems Manual for Environmental Laboratories, 5.0, July 2013
- USEPA, Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review, October 2004
- EPA SW 846, Third Edition, Test Methods for Evaluating Solid Waste, update 1, July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III, December 1996; update IIIA, April 1998; IIIB, November 2004; update IV, February 2007; update V, July 2014

Please feel free to contact us if you have any questions.

Sincerely,

[redacted]

EDD 90/10 ADR/IV

LDC #38019 (Arcadis-Millersville, MD / Fort Bliss, Castner Range)

LDC	SDG#	DATE REC'D	(2) DATE DUE	As, Zn (6010C)																															
Matrix:	Water/Soil			W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S
A	FA40657	02/01/17	02/22/17	0	1																														
Total	J/PG			0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

Shaded cells indicate Level IV validation (all other cells are ADR validation). These sample counts do not include MS/MSD, and DUPs

L:\Arcadis\Fort Bliss-Castner Range\38019ST.wpd

Data Validation Report
Fort Bliss, Castner Range

SDG: FA40657

Prepared for

Arcadis U.S., Inc.
401 E. Main Street, Suite 400
El Paso, TX 79901

Prepared by

Laboratory Data Consultants, Inc.
2701 Loker Ave West, Suite 220
Carlsbad, CA 92010

March 7, 2017

INTRODUCTION

This Data Validation Report (DVR) presents Level III data validation results for samples collected during the January 2017 sampling period. Data validation was performed in accordance with the Final Quality Assurance Project Plan (QAPP), Military Munitions Response Program Remedial Investigation, Closed Castner Firing Range, Fort Bliss, El Paso, Texas (February 2015), the U.S. Department of Defense (DoD) Quality Systems Manual (QSM) for Environmental Laboratories, Version 5.0 (July 2013), and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines (CLPNFG) for Inorganic Superfund Data Review (October 2004). Where specific guidance is not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Aresenic and Zinc by Environmental Protection Agency (EPA) SW 846 Method 6010C

The sample identification and methods of analyses performed on each sample is presented in Attachment 1. Overall data qualification summary is presented in Attachment 2. Level III Automated Data Review outliers are presented in Enclosure I.

All sample results were subjected to Level III data validation, which comprises an evaluation of quality control (QC) summary results for sample holding times, instrument performance check, initial and continuing calibrations, laboratory blanks, initial and continuing calibration blanks (ICB/CCBs), interference check (ICSA and ICSAB) samples, matrix spike/matrix spike duplicate (MS/MSD), serial dilutions, duplicate sample analysis (DUP), laboratory control sample (LCS), split duplicate samples, and internal standards.

Automated data review was performed on all QC summary results using the Automated Data Review (ADR) software program (LDC, 2013) with exception of the instrument performance check, calibrations, interference check samples, ICB/CCBs, serial dilutions, split duplicate samples, and internal standards which were validated manually. Quality assurance (QA)/QC criteria specified in the QAPP, DoD QSM and CLPNFGs were incorporated with the program's reference library to assess compliance with project requirements.

The following are definitions of the data qualifiers:

J (Estimated): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated due to non-conformances discovered during data validation.

U (Non-detected): The compound or analyte was analyzed for and positively identified by the laboratory; however the analyte should be considered non-detect at the reported concentration due to the presence of contaminants detected in the associated blank(s).

UJ (Non-detected estimated): The compound or analyte was reported as not detected by the laboratory; however the reported quantitation/detection limit is estimated due to non-conformances discovered during data validation.

R (Rejected): The sample results were rejected due to gross non-conformances discovered during data validation. Data qualified as rejected is not usable.

NJ (Presumptive): Presumptive evidence of presence of the compound at an estimated quantity.

NA (Not applicable): Data did not warrant qualification since detected results only are affected and the compound was not detected in the associated samples.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

I. Sample Receipt & Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

II. Instrument Performance Check

Instrument performance was checked at the frequency required by the method.

All criteria for the instrument performance check were met.

III. Initial Calibration and Initial Calibration Verification

All criteria for the initial calibration and initial calibration verifications of the method were met.

IV. Continuing Calibration

All criteria for the continuing calibration verifications of the method were met.

V. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met.

VI. Laboratory Blanks

Laboratory blanks were performed as required by the method. No contaminant concentrations were detected in the laboratory blanks reviewed by the ADR software program with the exception of one blank for zinc. The associated sample results were not detected or were significantly greater than the concentrations found in the blanks, therefore no data were qualified. The details are presented in Enclosure I.

VII. Field Blanks

No field blanks were identified in these SDGs.

VIII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on an associated project sample. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the exception of one MS/MSD pair for zinc. No data were qualified where sample concentrations were significantly greater (>4x) than the spike amount. The details are presented in Enclosure I.

IX. Duplicate Sample Analysis

Duplicate (DUP) sample analysis was performed on an associated project sample. Results were within QC limits with the exception of one DUP for zinc. The associated sample results were qualified as detected estimated (J) as applicable. The details regarding the qualification of data

are provided in Enclosure I.

X. Serial Dilution

Serial dilution analysis was performed on an associated project sample. The analysis criteria were met.

XI. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

XII. Field Duplicates/Split Samples

No field duplicates were identified in this SDG.

Samples FTBL-SED-064-0-6-011817-QA and FTBL-SED-064-0-6-011817 (from SDG K1700745) were identified as split samples. No metals were detected in any of the split samples with the following exceptions:

Analyte	Concentration (mg/Kg)		RPD (≤50)	Qualifiers
	FTBL-SED-064-0-6-011817 (SDG: K1700745)	FTBL-SED-064-0-6-011817-QA (SDG: FA40657)		
Arsenic	9.10	6.2	38	NA
Zinc	166	124	29	NA

XIII. Internal Standards

All internal standard areas and percent recoveries were within QC limits.

XIV. Compound Quantitation

The laboratory reporting limits were evaluated. All laboratory reporting limits met the specified requirements.

XV. Overall Assessment of Data

The analysis was conducted within all specifications of the methods. No results were rejected in these SDGs.

Due to DUP RPD, data were qualified as estimated in one sample.

The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable. Sample results that were found to be estimated (J) are usable for limited purposes only. Based upon the data validation all other results are considered valid and usable for all purposes.

Data flags are summarized and are presented as Attachment 2.

Attachment 1

Sample Cross Reference

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
18-Jan-2017	FTBL-SED-064-0-6-011817-Q	MP31553-S2	N	6010C	6010C	III

III = EPA Level 3 Data Review
IV = EPA Level 4 Data Validation
N = Normal Sample
FD = Field Duplicate
TB = Trip Blank
FB = Field Blank
MS = Matrix Spike
MSD = Matrix Spike Duplicate

Attachment 2

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: FA40657 **Laboratory: ACTO**

EDD Filename: FA40657-SEDD_2a_1 **eQAPP Name: Arcadis_FtBliss_Accutest_170302**

Method Category: **METALS**

Method: **6010C** ***Matrix:*** **Soil**

Sample ID: **FTBL-SED-064-0-6-011817-QA** ***Collected:*** **1/18/2017 3:20:00 PM** ***Analysis Type:*** **Initial** ***Dilution:*** **10**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
ZINC	124		1.9	LOD	7.5	LOQ	mg/Kg	J	Ld

* denotes a non-reportable result

Project Name and Number: - USACE Project: Castner Firing Range; Ft Bliss, TX

Data Qualifier Summary

Lab Reporting Batch ID: FA40657 **Laboratory: ACTO**

EDD Filename: FA40657-SEDD_2a_1 **eQAPP Name: Arcadis_FtBliss_Accutest_170302**

Reason Code Legend

Reason Code	*Description*
Ld	Laboratory Duplicate Precision
Mb	Method Blank Contamination
Ms	Matrix Spike Lower Estimation
Ms	Matrix Spike Upper Estimation

* denotes a non-reportable result

Project Name and Number: - USACE Project: Castner Firing Range; Ft Bliss, TX

Enclosure I

Level III ADR Outliers

(Including Manual Review Outliers)

Quality Control
Outlier Reports

FA40657

Method Blank Outlier Report

Lab Reporting Batch ID: FA40657 **Laboratory: ACTO**

EDD Filename: FA40657-SEDD_2a_1 **eQAPP Name: Arcadis_FtBliss_Accutest_170302**

Method: **6010C**
Matrix: **Soil**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
MP31553-MB1	1/26/2017 5:12:00 PM	ZINC	0.20 mg/Kg	FTBL-SED-064-0-6-011817-QA

Project Name and Number: - USACE Project: Castner Firing Range; Ft Bliss, TX

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: FA40657 **Laboratory: ACTO**

EDD Filename: FA40657-SEDD_2a_1 **eQAPP Name: Arcadis_FtBliss_Accutest_170302**

Method: **6010C**
Matrix: **Soil**

QC Sample ID (Associated Samples)	*Compound*	*MS %R*	*MSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
FTBL-SED-064-0-6-011817-QAMS (Dry) FTBL-SED-064-0-6-011817-QAMSD (Dry) (FTBL-SED-064-0-6-011817-QA)	ZINC	146.3	76.1	82.00-113.00	-	ZINC	No Qual, >4x

Project Name and Number: - USACE Project: Castner Firing Range; Ft Bliss, TX

Lab Duplicate Outlier Report

Lab Reporting Batch ID: FA40657 **Laboratory: ACTO**

EDD Filename: FA40657-SEDD_2a_1 **eQAPP Name: Arcadis_FtBliss_Accutest_170302**

Method: 6010C
Matrix: Soil

QC Sample ID (Associated Sample ID)	*Analyte*	*Sample RPD*	*eQAPP RPD*	*Flag*
FTBL-SED-064-0-6-011817-QADUP (Dry) (FTBL-SED-064-0-6-011817-QA)	ZINC	25.4	20.00	J (all detects) UJ (all non-detects)

Project Name and Number: - USACE Project: Castner Firing Range; Ft Bliss, TX

LDC #: 38019A4b
SDG #: FA40657
Laboratory: Accutest

VALIDATION COMPLETENESS WORKSHEET
Level ADR

Date: 2/3/17
Page: 1 of 1
Reviewer: G
2nd Reviewer: KK

METHOD: Arsenic, Zinc (EPA SW 846 Method 6010C)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A /N	
II.	Instrument Calibration	A	
III.	ICP Interference Check Sample (ICS) Analysis	A	
IV.	Laboratory Blanks	A	ICB/CCB only
V.	Field Blanks	N	
VI.	Matrix Spike/Matrix Spike Duplicates	N	MS/D (Zn >4X)
VII.	Duplicate sample analysis	N	
VIII.	Serial Dilution	A	Zn <50xLOQ
IX.	Laboratory control samples	N	
X.	Field Duplicates	SW	split=C1, FTBL-SED-064-0-6-011817 (SDG: R1700745)
XI.	Sample Result Verification	N	
XII.	Overall Assessment of Data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID	Lab ID	Matrix	Date
1	FTBL-SED-064-0-6-011817-QA	FA40657-1	Soil	01/18/17
2	FTBL-SED-064-0-6-011817-QAMS	FA40657-1MS	Soil	01/18/17
3	FTBL-SED-064-0-6-011817-QAMSD	FA40657-1MSD	Soil	01/18/17
4	↓ DUP			
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				

Notes:

LDC #: 38UF1A4b

VALIDATION FINDINGS WORKSHEET
Sample Specific Element Reference

Reviewer: [illegible]
2nd reviewer: RK

All circled elements are applicable to each sample.

Sample ID	Matrix	Target Analyte List (TAL)
1		Al, Sb, (As), Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, (Zn), Mo, B, Sn, Ti, ___ ___
2-4		Al, Sb, (As), Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, (Zn), Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
Analysis Method		
ICP		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
ICP-MS		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
GFAA		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___

Comments: Mercury by CVAA if performed

LDC#: 38019A4b

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Reviewer: C
2nd Reviewer: KAC

METHOD: Metals (EPA Method 6010B/7000)

Analyte	Concentration (mg/Kg)		RPD (≤50)	
	FTBL-SED-064-0-6-011817	1		
Arsenic	9.10	6.2	38	
Zinc	166	124	29	

\\LDCFILESERVER\Validation\FIELD DUPLICATES\FD_inorganic\38019A4b.wpd

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www.alsglobal.com

June 20, 2016

Analytical Report for Service Request No: K1604717

ARCADIS U.S., Inc.
2929 Briarpark Drive
Suite 300
Houston, TX 77042-3745

RE: Castner Range, Ft. Bliss TX / 06261038.0000

Enclosed are the results of the sample(s) submitted to our laboratory May 06, 2016
For your reference, these analyses have been assigned our service request number **K1604717.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is . You may also contact me via

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

ALS Environmental
ALS Group USA, Corp
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Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEC UST	http://dec.alaska.gov/applications/eh/ehllabreports/USTLabs.aspx	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L14-51
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	Not available	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/portal/DIVISIONS/PublicParticipationandPermitSupport/LouisianaLaboratoryAccreditationProgram.aspx	03016
Maine DHS	Not available	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Montana DPHHS	http://www.dphhs.mt.gov/publichealth/	CERT0047
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/oqa/	WA005
North Carolina DWQ	http://www.dwqlab.org/	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/envserv/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wisconsin DNR	http://dnr.wi.gov/	998386840
Wyoming (EPA Region 8)	http://www.epa.gov/region8/water/dwhome/wyomingdi.html	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Case Narrative

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ALS ENVIRONMENTAL

Client:	ARCADIS U.S., Inc.	**Service Request No.:**	K1604717
Project:	Castner Range, Ft. Bliss TX/ 06261038.0000	**Date Received:**	05/06/16
Sample Matrix:	Soil		

Case Narrative

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier IV validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Twenty-six soil samples were received for analysis at ALS Environmental on 05/06/16. The samples were received in good condition and consistent with the accompanying chain of custody form, except where noted on the cooler receipt and preservation form included in this report. The samples were stored in a refrigerator at 4ºC upon receipt at the laboratory.

Total Metals

Matrix Spike Recovery Exceptions:
Antimony recoveries are generally low for soil and sediment samples when digested using EPA Method 3050B. Despite anticipated low recoveries, the method is still generally prescribed because of its versatility for general metals analysis. Antimony results (in conjunction with the matrix spike recovery) from this procedure should only be used as indicators to estimate concentrations. The matrix spike and matrix spike duplicate recoveries of Antimony for samples FTBL-SED-51-0-6-050316 and FTBL-SED-31-0-6-050516 were below the DoD QSM control criterion. Since low recoveries resulted from a method defect and were possibly magnified by certain matrix components, no corrective action was appropriate. Alternative procedures that specifically target Antimony are available but were not specified for this project. The associated QA/QC results (e.g. control sample, calibration standards, etc.) indicated the analysis was in control.

The matrix spike recovery of Copper for sample FTBL-SED-51-0-6-050316 was outside control criteria. Recovery in the Laboratory Control Sample (LCS) was acceptable, which indicated the analytical batch was in control. No further corrective action was appropriate.

No other anomalies associated with the analysis of these samples were observed.

Approved _____

TRRP

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Appendix A ALS Kelso-Laboratory Data Package Signature Page

This data package consists of:

- ☐ This signature page, the laboratory review checklist, and the following reportable data:
- ☐ R1 Field chain-of-custody documentation;
- ☐ R2 Sample identification cross-reference;
- ☐ R3 Test reports (analytical data sheets) for each environmental sample that includes:
  a) Items consistent with NELAC 5.13 or ISO/IEC 17025 Section 5.10
  b) dilution factors,
  c) preparation methods,
  d) cleanup methods, and
  e) if required for the project, tentatively identified compounds (TICs).
- ☐ R4 Surrogate recovery data including:
  a) Calculated recovery (%R), and
  b) The laboratory's surrogate QC limits.
- ☐ R5 Test reports/summary forms for blank samples;
- ☐ R6 Test reports/summary forms for laboratory control samples (LCSs) including:
  a) LCS spiking amounts,
  b) Calculated %R for each analyte, and
  c) The laboratory's LCS QC limits.
- ☐ R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  a) Samples associated with the MS/MSD clearly identified,
  b) MS/MSD spiking amounts,
  c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  d) Calculated %Rs and relative percent differences (RPDs), and
  e) The laboratory's MS/MSD QC limits
- ☐ R8 Laboratory analytical duplicate (if applicable) recovery and precision:
  a) the amount of analyte measured in the duplicate,
  b) the calculated RPD, and
  c) the laboratory's QC limits for analytical duplicates.
- ☐ R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix;
- ☐ R10 Other problems or anomalies.
- ☐ The Exception Report for every "No" or "Not Reviewed (NR)" item in laboratory review checklist.

Release Statement: I am responsible for the release of this laboratory data package. This data package has been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. By me signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

Check, if applicable: [ ] –This laboratory is an in-house laboratory controlled by the person responding to rule. The official signing the cover page of the rule-required report (for example, the APAR) in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Laboratory Review Checklist: Reportable Data								
Laboratory Name: ALS Laboratory Group			LRC Date: 6/24/2016					
Project Name: Castner Range Fort Bliss, TX			Laboratory Job Number: K1604717					
Reviewer Name:			Prep Batch Number(s): 261931					
#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]	
R1	I	**Chain-of-custody (C-I-C)**						
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X					
		Were all departures from standard conditions described in an exception report?	X					
R2	I	**Sample and quality control (QC) identification**						
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X					
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X					
R3	I	**Test reports**						
		Were all samples prepared and analyzed within holding times?	X					
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X					
		Were calculations checked by a peer or supervisor?	X					
		Were all analyte identifications checked by a peer or supervisor?	X					
		Were sample detection limits reported for all analytes not detected?	X					
		Were all results for soil and sediment samples reported on a dry weight basis?	X					
		Were % moisture (or solids) reported for all soil and sediment samples?	X					
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW-846 Method 5035?	X					
		If required for the project, TICs reported?	X					
R4	I	**Surrogate recovery data**						
		Were surrogates added prior to extraction?	X					
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X					
R5	I	**Test reports/summary forms for blank samples**						
		Were appropriate type(s) of blanks analyzed?	X					
		Were blanks analyzed at the appropriate frequency?	X					
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X					
		Were blank concentrations < MQL?	X					
R6	I	**Laboratory control samples (LCS):**						
		Were all COCs included in the LCS?	X					
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X					
		Were LCSs analyzed at the required frequency?	X					
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X					
		Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X					
		Was the LCSD RPD within QC limits?	X					
R7	I	**Matrix spike (MS) and matrix spike duplicate (MSD) data**						
		Were the project/method specified analytes included in the MS and MSD?	X					
		Were MS/MSD analyzed at the appropriate frequency?	X					
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	X					
		Were MS/MSD RPDs within laboratory QC limits?		ER1				
R8	I	**Analytical duplicate data**						
		Were appropriate analytical duplicates analyzed for each matrix?	X					
		Were analytical duplicates analyzed at the appropriate frequency?	X					
		Were RPDs or relative standard deviations within the laboratory QC limits?	X					
R9	I	**Method quantitation limits (MQLs):**						
		Are the MQLs for each method analyte included in the laboratory data package?	X					
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X					
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X					
R10	I	**Other problems/anomalies**						
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X					
		Were all necessary corrective actions performed for the reported data?	X					
		Was applicable and available technology used to lower the SDL and minimize the matrix interference affects on the sample results?	X					
		Is the laboratory NELAC-accredited under the Texas Laboratory Program for the analytes, matrices and methods associated with this laboratory data package?	X					

Laboratory Review Checklist: Reportable Data							
Laboratory Name: ALS Laboratory Group			LRC Date: 6/24/2016				
Project Name: Castner Range Fort Bliss, TX			Laboratory Job Number: K1604717				
Reviewer Name:			Prep Batch Number(s): 261931				
#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	I	**Initial calibration (ICAL)**					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	I	**Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB)**					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	I	**Mass spectral tuning:**					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	I	**Internal standards (IS):**					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	I	**Raw data** (NELAC section 1 appendix A glossary, and section 5.12 or ISO/IEC 17025 section					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	I	**Dual column confirmation**					
		Did dual column confirmation results meet the method-required QC?			X		
S7	I	**Tentatively identified compounds (TICs):**					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	**Interference Check Sample (ICS) results:**					
		Were percent recoveries within method QC limits?	X				
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X				
S10	I	**Method detection limit (MDL) studies**					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	I	**Proficiency test reports:**					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	I	**Standards documentation**					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	I	**Compound/analyte identification procedures**					
		Are the procedures for compound/analyte identification documented?	X				
S14	I	**Demonstration of analyst competency (DOC)**					
		Was DOC conducted consistent with NELAC Chapter 5C or ISO/IEC 4?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	I	**Verification/validation documentation for methods** (NELAC Chap 5 or ISO/IEC 17025 Section 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	I	**Laboratory standard operating procedures (SOPs):**					
		Are laboratory SOPs current and on file for each method performed?	X				

Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
I = Organic Analyses; I = Inorganic Analyses (and general chemistry, when applicable);
NA = Not Applicable;
NR = Not Reviewed;
R# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Reportable Data	
Laboratory Name: ALS Laboratory Group	LRC Date: 6/24/2016
Project Name: Castner Range Fort Bliss, TX	Laboratory Job Number: K1604717
Reviewer Name:	Prep Batch Number(s): 261931

ER#[5]	Description
1,2	See Case Narrative page 7 for details.

Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
I = Organic Analyses; I = Inorganic Analyses (and general chemistry, when applicable);
NA = Not Applicable;
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R# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Chain of Custody

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Chain o Custody

ADDRESS 1317 South 13th Ave., Kelso, WA 98626
PHONE 1 360 577 7222 FAX 1 360 636 1068

Part of the ALS Group A Campbell Brothers Limited Company

Work Order No.: 1C1604717 1 of 3

Project Manager:		**Bill to:**	**PO NUMBER:** Arcadis
Client Name:	Arcadis	**Company:**	Arcadis
Address:	6230 Plaza Dr. Suite 600	**Address:**	6230 Plaza Dr. Suite 600
City, State ZIP:	Highlands Ranch CO [redacted]	**City, State ZIP:**	Highlands Ranch
Email:	[redacted] (303)471-3649	**Email:**	
Project Name:	[redacted]		
Project Number:			
Sampler's Name:			

SAMPLE RECEIPT

Temperature (°C):		**Temp Blank Present**			
Received Intact:	Yes	No	N/A	**Wet Ice / Blue Ice**	
Cooler Custody Seals:	Yes	No	N/A	**Total Containers:**	
Sample Custody Seals:	Yes	No	N/A		

REQUESTED ANALYSIS

TAT

- [X] Routine 21day
- [ ] Same Day 100%
- [ ] Next Day ***
- [ ] 3 Day
- [ ] 5 Day 50%

Surcharges. Please call for availability

Due Date:

Sample Identification	Matrix	Date Sampled	Time Sampled	Lab ID	No. of Containers	Sb, As, Be, Cu, Pb, Ni, Zn	Comments
FTBL-SED-51-0-6-050316	S	5-3-16	10:50		1	X	
FTBL-SED-51-12-18-050316	S	5-3-16	11:00		1	X	
FTBL-SED-36-0-6-050316	S	5-3-16	12:30		1	X	
FTBL-SED-37-0-6-050316	S	5-3-16	12:48		1	X	
FTBL-SED-38-0-6-050316	S	5-3-16	13:15		1	X	
FTBL-SED-39-0-6-050316	S	5-3-16	13:30		1	X	
FTBL-SED-39-12-18-050316	S	5-3-16	13:40		1	X	
FTBL-SED-40-0-6-050316	S	5-3-16	13:50		1	X	
FTBL-SED-40-12-18-050316	S	5-3-16	14:00		1	X	
FTBL-SED-46-0-6-050416	S	5-4-16	09:45		1	X	
FTBL-SED-47-0-6-050416	S	5-4-16	10:00		1	X	

Dissolved	Ag, Al, As, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, K, Li, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Se, Si, Sn, Sr, Tl, V, Zn, Zr
Total	Ag, Al, As, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, K, Li, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Se, Si, Sn, Sr, Tl, V, Zn, Zr

Additional Methods Available Upon Request

RELINQUISHED BY			RECEIVED BY		
Print Name	**Signature**	**Date/Time**	**Print Name**	**Signature**	**Date/Time**
[redacted]		5/5/16/1530	[redacted]		5/6/16 0940

Revised: 4/21/2016
017583

Chain of Custody

ADDRESS 1317 South 13th Ave., Kelso, WA 98626
PHONE 1 360 577 7222 FAX 1 360 636 1068

Part of the ALS Group A Campbell Brothers Limited Company

Work Order No.: 1C1604717

Project Manager:		Bill to:	PO NUMBER:
Client Name:	Arcadis	Company:	Arcadis
Address:	6230 Plaza Dr. Suite [redacted]	Address:	6230 Plaza Dr. Suite 600
City, State ZIP: [redacted]		City, State ZIP:	Highlands Ranch CO
Phone:	(303) 471-3049	Email:	
Project Name:	[redacted]		
Project Number:	06201038.0000		

SAMPLE RECEIPT

Temperature (°C):			Temp Blank Present		
Received Intact:	Yes	No	N/A	Wet Ice / Blue Ice	
Cooler Custody Seals:	Yes	No	N/A	Total Containers:	
Sample Custody Seals:	Yes	No	N/A		

REQUESTED ANALYSIS

TAT

- [X] Routine 21day
- [ ] Same Day 100%
- [ ] Next Day ***
- [ ] 3 Day
- [ ] 5 Day 50%

Surcharges. Please call for availability

Due Date:

Sample Identification	Matrix	Date Sampled	Time Sampled	Lab ID	No. of Containers	Sb, As, Be, Cu, Pb, Li, Zn	Comments
FTBL-SED-48-0-6-050416	S	5-4-16	10:25		1	X	
FTBL-SED-49-0-6-050416	S	5-4-16	10:40		1	X	
FTBL-SED-50-0-6-050416	S	5-4-16	11:35		1	X	
FTBL-SED-45-0-6-050416	S	5-4-16	14:00		1	X	
FTBL-SED-44-0-6-050416	S	5-4-16	14:20		1	X	
FTBL-SED-43-0-6-050416	S	5-4-16	15:00		1	X	
FTBL-SED-42-0-6-050416	S	5-4-16	15:20		1	X	
FTBL-SED-41-0-6-050416	S	5-4-16	15:45		1	X	
FD050416	S	5-4-16			1	X	
FTBL-SED-31-0-6-050516	S	5-5-16	09:20		1	X	
FTBL-SED-32-0-6-050516	S	5-5-16	09:40		1	X	

Dissolved	Ag, Al, As, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, K, Li, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Se, Si, Sn, Sr, Tl, V, Zn, Zr
Total	Ag, Al, As, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, K, Li, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Se, Si, Sn, Sr, Tl, V, Zn, Zr

Additional Methods Available Upon Request

RELINQUISHED BY			RECEIVED BY		
Print Name	Signature	Date/Time	Print Name	Signature	Date/Time
[redacted]			[redacted]		5/6/16 0940

Revised: 4/21/2016
017584

Chain of Custody

ADDRESS 1317 South 13th Ave., Kelso, WA 98626
PHONE 1 360 577 7222 FAX 1 360 636 1068

Part of the ALS Group A Campbell Brothers Limited Company

Work Order No.: 1C1604717

3 of 3

Project Manager:		Bill to:	PO NUMBER:
Client Name:	ArcAris Plaza Dr AG	Company:	ArcAris Plaza Dr.
Address:	6030 Highlands Ranch St. 6000	Address:	6030 Highlands Ranch Ste 6000
City, State ZIP:	Highlands Ranch CO	City, State ZIP:	Highlands Ranch Co AG
Email:	[redacted] 303-471-3099	Email:	
Project Name:	0626D1038.0000		
Project Number:	Castner Range		

[redacted]

SAMPLE RECEIPT

Temperature (°C):			Temp Blank Present		
Received Intact:	Yes	No	N/A	Wet Ice / Blue Ice	
Cooler Custody Seals:	Yes	No	N/A	Total Containers:	
Sample Custody Seals:	Yes	No	N/A		

REQUESTED ANALYSIS

TAT

- [x] Routine 21day
- [ ] Same Day 100%
- [ ] Next Day ***
- [ ] 3 Day
- [ ] 5 Day 50%

Surcharges. Please call for availability

Due Date:

Sample Identification	Matrix	Date Sampled	Time Sampled	Lab ID	No. of Containers	Sb, As, Be, Cu, Pb, Li, Zn	Comments
~~FTBL-SED-0-6-050516-KG~~	—	—	—		1	1	
FTBL-SED-33-0-6-050516	S	5-5-16	10:10		1	X	
FTBL-SED-34-0-6-050516	S	5-5-16	11:00		1	X	
FD050516	S	5-5-16	—		1	X	
FTBL-SED-35-0-6-050516	S	5-5-16	11:50		1	X	

[redacted]

Dissolved	Ag, Al, As, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, K, Li, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Se, Si, Sn, Sr, Tl, V, Zn, Zr	Additional Methods Available Upon Request
Total	Ag, Al, As, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, K, Li, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Se, Si, Sn, Sr, Tl, V, Zn, Zr	

[redacted]

PC GS

Cooler Receipt and Preservation Form

Client Arcadis Service Request K16 04717

Received: 5/6/16 Opened: 5/6/16 By: [signature] Unloaded: 5/6/16 By: [signature]

1. Samples were received via? *Mail* (*Fed Ex*) *UPS* *DHL* *PDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) (*Cooler*) *Box* *Envelope* *Other* _____ *NA*
3. Were custody seals on coolers? NA (N) If yes, how many and where? 2 front + back
   If present, were custody seals intact? (Y) N If present, were they signed and dated? (Y) N

Raw Cooler Temp	Corrected Cooler Temp	Raw Temp Blank	Corrected Temp Blank	Corr. Factor	Thermometer ID	Cooler/COC ID NA	Tracking Number NA	Filed
0.6	0.7	1.4	1.2	0.1	356		783OC144 6027	

4. Packing material: *Inserts* (*Baggies*) (*Bubble Wrap*) *Gel Packs* (*Wet Ice*) *Dry Ice* *Sleeves* _____
5. Were custody papers properly filled out (ink, signed, etc.)? NA (Y) N
6. Did all bottles arrive in good condition (unbroken)? *Indicate in the table below.* NA Y (N)
7. Were all sample labels complete (i.e analysis, preservation, etc.)? NA (Y) N
8. Did all sample labels and tags agree with custody papers? *Indicate major discrepancies in the table on page 2.* NA (Y) N
9. Were appropriate bottles/containers and volumes received for the tests indicated? NA (Y) N
10. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* (NA) Y N
11. Were VOA vials received without headspace? *Indicate in the table below.* (NA) Y N
12. Was C12/Res negative? (NA) Y N

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Out of Temp	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time
* FTBL-SED-40-12-18-050316				X						
* FTBL-SED-34-06-050516				X						

Notes, Discrepancies, & Resolutions:

* Transferred to new 4oz jar.

Page ____ *of* ____

Total Solids

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Analytical Report

Client:	ARCADIS U.S., Inc.	**Service Request:**	K1604717
Project:	Castner Range, Ft. Bliss TX/06261038.0000	**Date Collected:**	05/03/16 - 05/05/16
Sample Matrix:	Soil	**Date Received:**	05/6/16
Analysis Method:	160.3 Modified	**Units:**	Percent
Prep Method:	None	**Basis:**	As Received

Solids, Total

Sample Name	Lab Code	Result	MRL	MDL	Dil.	Date Analyzed	Q
FTBL-SED-51-0-6-050316	K1604717-001	**99.4**	-	-	1	05/16/16 17:56	
FTBL-SED-51-12-18-050316	K1604717-002	**97.1**	-	-	1	05/16/16 17:56	
FTBL-SED-36-0-6-050316	K1604717-003	**99.2**	-	-	1	05/16/16 17:56	
FTBL-SED-37-0-6-050316	K1604717-004	**98.5**	-	-	1	05/16/16 17:56	
FTBL-SED-38-0-6-050316	K1604717-005	**97.8**	-	-	1	05/16/16 17:56	
FTBL-SED-39-0-6-050316	K1604717-006	**98.2**	-	-	1	05/16/16 17:56	
FTBL-SED-39-12-18-050316	K1604717-007	**96.4**	-	-	1	05/16/16 17:56	
FTBL-SED-40-0-6-050316	K1604717-008	**100**	-	-	1	05/16/16 17:56	
FTBL-SED-40-12-18-050316	K1604717-009	**84.8**	-	-	1	05/16/16 17:56	
FTBL-SED-46-0-6-050416	K1604717-010	**98.1**	-	-	1	05/16/16 17:56	
FTBL-SED-47-0-6-050416	K1604717-011	**98.9**	-	-	1	05/16/16 17:56	
FTBL-SED-48-0-6-050416	K1604717-012	**98.7**	-	-	1	05/16/16 17:56	
FTBL-SED-49-0-6-050416	K1604717-013	**98.8**	-	-	1	05/16/16 17:56	
FTBL-SED-50-0-6-050416	K1604717-014	**99.3**	-	-	1	05/16/16 17:56	
FTBL-SED-45-0-6-050416	K1604717-015	**98.7**	-	-	1	05/16/16 17:56	
FTBL-SED-44-0-6-050416	K1604717-016	**99.8**	-	-	1	05/16/16 17:56	
FTBL-SED-43-0-6-050416	K1604717-017	**99.7**	-	-	1	05/16/16 17:56	
FTBL-SED-42-0-6-050416	K1604717-018	**99.8**	-	-	1	05/16/16 17:56	
FTBL-SED-41-0-6-050416	K1604717-019	**100**	-	-	1	05/16/16 17:56	
FD050416	K1604717-020	**98.4**	-	-	1	05/16/16 17:56	
FTBL-SED-31-0-6-050516	K1604717-021	**99.1**	-	-	1	05/16/16 18:29	
FTBL-SED-32-0-6-050516	K1604717-022	**97.9**	-	-	1	05/16/16 18:29	
FTBL-SED-33-0-6-050516	K1604717-023	**99.7**	-	-	1	05/16/16 18:29	
FTBL-SED-34-0-6-050516	K1604717-024	**83.2**	-	-	1	05/16/16 18:29	
FD050516	K1604717-025	**99.9**	-	-	1	05/16/16 18:29	
FTBL-SED-35-0-6-050516	K1604717-026	**97.0**	-	-	1	05/16/16 18:29	

QA/QC Report

Client:	ARCADIS U.S., Inc.	**Service Request:**	K1604717
Project	Castner Range, Ft. Bliss TX/06261038.0000	**Date Collected:**	05/03/16 - 05/05/16
Sample Matrix:	Soil	**Date Received:**	05/06/16
Analysis Method:	160.3 Modified	**Units:**	Percent
Prep Method:	None	**Basis:**	As Received

Replicate Sample Summary
Inorganic Parameters

Sample Name:	Lab Code:	MRL	Sample Result	Duplicate Result	Average	RPD	RPD Limit	Date Analyzed
FTBL-SED-51-0-6-050316	K1604717-001DUP	-	99.4	99.7	99.6	<1	20	05/16/16
FTBL-SED-47-0-6-050416	K1604717-011DUP	-	98.9	99.0	99.0	<1	20	05/16/16
FTBL-SED-31-0-6-050516	K1604717-021DUP	-	99.1	99.1	99.1	<1	20	05/16/16
Batch QC	K1605068-006DUP	-	83.7	84.7	84.2	1	20	05/16/16
Batch QC	K1605068-012DUP	-	82.0	81.6	81.8	<1	20	05/16/16

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client:	ARCADIS U.S., Inc.	**Service Request:**	K1604717
Project No.:	06261038.0000	**Date Collected:**	05/03/16
Project Name:	Castner Range Fort Bliss, TX	**Date Received:**	05/06/16
Matrix:	SOIL	**Units:**	mg/Kg
		Basis:	DRY

Sample Name: **FTBL-SED-51-0-6-050316** **Lab Code:** **K1604717-001**

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.042	0.021	0.008	5.0	05/21/16	05/26/16	0.237		J
Arsenic	6020A	0.42	0.08	0.03	5.0	05/21/16	05/26/16	4.05		
Beryllium	6020A	0.017	0.017	0.004	5.0	05/21/16	05/26/16	0.974		
Copper	6020A	0.08	0.08	0.03	5.0	05/21/16	05/26/16	17.3		J
Lead	6020A	0.04	0.04	0.02	5.0	05/21/16	05/26/16	40.9		
Nickel	6020A	0.17	0.08	0.03	5.0	05/21/16	05/26/16	8.26		
Zinc	6020A	0.4	0.4	0.2	5.0	05/21/16	05/26/16	51.6		

% Solids: **99.4**

Comments:

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1604717
Date Collected: 05/03/16
Date Received: 05/06/16
Units: mg/Kg
Basis: DRY

Sample Name: FTBL-SED-51-12-18-050316 **Lab Code:** K1604717-002

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.039	0.019	0.008	5.0	05/21/16	05/26/16	0.394		J
Arsenic	6020A	0.39	0.08	0.03	5.0	05/21/16	05/26/16	5.26		
Beryllium	6020A	0.015	0.015	0.004	5.0	05/21/16	05/26/16	1.11		
Copper	6020A	0.08	0.08	0.03	5.0	05/21/16	05/26/16	24.4		J
Lead	6020A	0.04	0.04	0.02	5.0	05/21/16	05/26/16	62.2		
Nickel	6020A	0.16	0.08	0.02	5.0	05/21/16	05/26/16	10.2		
Zinc	6020A	0.4	0.4	0.2	5.0	05/21/16	05/26/16	61.8		

% Solids: 97.1

Comments:

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1604717
Date Collected: 05/03/16
Date Received: 05/06/16
Units: mg/Kg
Basis: DRY

Sample Name: FTBL-SED-36-0-6-050316 **Lab Code:** K1604717-003

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.035	0.018	0.007	5.0	05/21/16	05/26/16	0.226		J
Arsenic	6020A	0.35	0.07	0.03	5.0	05/21/16	05/26/16	7.20		
Beryllium	6020A	0.014	0.014	0.004	5.0	05/21/16	05/26/16	1.63		
Copper	6020A	0.07	0.07	0.03	5.0	05/21/16	05/26/16	33.2		J
Lead	6020A	0.04	0.04	0.01	5.0	05/21/16	05/26/16	32.8		
Nickel	6020A	0.14	0.07	0.02	5.0	05/21/16	05/26/16	26.5		
Zinc	6020A	0.4	0.4	0.1	5.0	05/21/16	05/26/16	85.6		

% Solids: 99.2

Comments:

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1604717
Date Collected: 05/03/16
Date Received: 05/06/16
Units: mg/Kg
Basis: DRY

Sample Name: FTBL-SED-37-0-6-050316 **Lab Code:** K1604717-004

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.034	0.017	0.007	5.0	05/21/16	05/26/16	0.288		J
Arsenic	6020A	0.34	0.07	0.03	5.0	05/21/16	05/26/16	6.39		
Beryllium	6020A	0.014	0.014	0.003	5.0	05/21/16	05/26/16	1.35		
Copper	6020A	0.07	0.07	0.03	5.0	05/21/16	05/26/16	19.0		J
Lead	6020A	0.03	0.03	0.01	5.0	05/21/16	05/26/16	22.3		
Nickel	6020A	0.14	0.07	0.02	5.0	05/21/16	05/26/16	10.1		
Zinc	6020A	0.3	0.3	0.1	5.0	05/21/16	05/26/16	61.6		

% Solids: 98.5

Comments:

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1604717
Date Collected: 05/03/16
Date Received: 05/06/16
Units: mg/Kg
Basis: DRY

Sample Name: FTBL-SED-38-0-6-050316 **Lab Code:** K1604717-005

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.038	0.019	0.008	5.0	05/21/16	05/26/16	0.203		J
Arsenic	6020A	0.38	0.08	0.03	5.0	05/21/16	05/26/16	6.36		
Beryllium	6020A	0.015	0.015	0.004	5.0	05/21/16	05/26/16	1.27		
Copper	6020A	0.08	0.08	0.03	5.0	05/21/16	05/26/16	12.6		J
Lead	6020A	0.04	0.04	0.02	5.0	05/21/16	05/26/16	17.1		
Nickel	6020A	0.15	0.08	0.02	5.0	05/21/16	05/26/16	11.2		
Zinc	6020A	0.4	0.4	0.2	5.0	05/21/16	05/26/16	61.6		

% Solids: 97.8

Comments:

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1604717
Date Collected: 05/03/16
Date Received: 05/06/16
Units: mg/Kg
Basis: DRY

Sample Name: FTBL-SED-39-0-6-050316 **Lab Code:** K1604717-006

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.042	0.021	0.008	5.0	05/21/16	05/26/16	0.360		J
Arsenic	6020A	0.42	0.09	0.03	5.0	05/21/16	05/26/16	8.89		
Beryllium	6020A	0.017	0.017	0.004	5.0	05/21/16	05/26/16	1.48		
Copper	6020A	0.09	0.09	0.03	5.0	05/21/16	05/26/16	26.0		J
Lead	6020A	0.04	0.04	0.02	5.0	05/21/16	05/26/16	37.7		
Nickel	6020A	0.17	0.09	0.03	5.0	05/21/16	05/26/16	12.7		
Zinc	6020A	0.4	0.4	0.2	5.0	05/21/16	05/26/16	89.1		

% Solids: 98.2

Comments:

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1604717
Date Collected: 05/03/16
Date Received: 05/06/16
Units: mg/Kg
Basis: DRY

Sample Name: FTBL-SED-39-12-18-050316 **Lab Code:** K1604717-007

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.044	0.022	0.009	5.0	05/21/16	05/26/16	0.273		J
Arsenic	6020A	0.44	0.09	0.04	5.0	05/21/16	05/26/16	8.02		
Beryllium	6020A	0.018	0.018	0.004	5.0	05/21/16	05/26/16	1.43		
Copper	6020A	0.09	0.09	0.04	5.0	05/21/16	05/26/16	20.9		J
Lead	6020A	0.04	0.04	0.02	5.0	05/21/16	05/26/16	30.1		
Nickel	6020A	0.18	0.09	0.03	5.0	05/21/16	05/26/16	13.1		
Zinc	6020A	0.4	0.4	0.2	5.0	05/21/16	05/26/16	74.3		

% Solids: 96.4

Comments:

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1604717
Date Collected: 05/03/16
Date Received: 05/06/16
Units: mg/Kg
Basis: DRY

Sample Name: FTBL-SED-40-0-6-050316 **Lab Code:** K1604717-008

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.049	0.024	0.010	5.0	05/21/16	05/26/16	0.244		J
Arsenic	6020A	0.49	0.10	0.04	5.0	05/21/16	05/26/16	5.90		
Beryllium	6020A	0.019	0.019	0.005	5.0	05/21/16	05/26/16	1.42		
Copper	6020A	0.10	0.10	0.04	5.0	05/21/16	05/26/16	6.51		J
Lead	6020A	0.05	0.05	0.02	5.0	05/21/16	05/26/16	17.8		
Nickel	6020A	0.19	0.10	0.03	5.0	05/21/16	05/26/16	5.53		
Zinc	6020A	0.5	0.5	0.2	5.0	05/21/16	05/26/16	129		

% Solids: 100.0

Comments:

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1604717
Date Collected: 05/03/16
Date Received: 05/06/16
Units: mg/Kg
Basis: DRY

Sample Name: FTBL-SED-40-12-18-050316 **Lab Code:** K1604717-009

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.046	0.023	0.009	5.0	05/21/16	05/26/16	0.154		J
Arsenic	6020A	0.46	0.09	0.04	5.0	05/21/16	05/26/16	6.45		
Beryllium	6020A	0.018	0.018	0.005	5.0	05/21/16	05/26/16	1.50		
Copper	6020A	0.09	0.09	0.04	5.0	05/21/16	05/26/16	6.99		J
Lead	6020A	0.05	0.05	0.02	5.0	05/21/16	05/26/16	15.6		
Nickel	6020A	0.18	0.09	0.03	5.0	05/21/16	05/26/16	5.60		
Zinc	6020A	0.5	0.5	0.2	5.0	05/21/16	05/26/16	102		

% Solids: 84.8

Comments:

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1604717
Date Collected: 05/04/16
Date Received: 05/06/16
Units: mg/Kg
Basis: DRY

Sample Name: FTBL-SED-46-0-6-050416 **Lab Code:** K1604717-010

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.044	0.022	0.009	5.0	05/21/16	05/26/16	0.385		J
Arsenic	6020A	0.44	0.09	0.04	5.0	05/21/16	05/26/16	11.5		
Beryllium	6020A	0.018	0.018	0.004	5.0	05/21/16	05/26/16	1.34		
Copper	6020A	0.09	0.09	0.04	5.0	05/21/16	05/26/16	30.1		J
Lead	6020A	0.04	0.04	0.02	5.0	05/21/16	05/26/16	44.6		
Nickel	6020A	0.18	0.09	0.03	5.0	05/21/16	05/26/16	12.4		
Zinc	6020A	0.4	0.4	0.2	5.0	05/21/16	05/26/16	85.6		

% Solids: 98.1

Comments:

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1604717
Date Collected: 05/04/16
Date Received: 05/06/16
Units: mg/Kg
Basis: DRY

Sample Name: FTBL-SED-47-0-6-050416 **Lab Code:** K1604717-011

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.037	0.019	0.007	5.0	05/21/16	05/26/16	0.349		J
Arsenic	6020A	0.37	0.08	0.03	5.0	05/21/16	05/26/16	13.5		
Beryllium	6020A	0.015	0.015	0.004	5.0	05/21/16	05/26/16	1.48		
Copper	6020A	0.08	0.08	0.03	5.0	05/21/16	05/26/16	20.5		J
Lead	6020A	0.04	0.04	0.02	5.0	05/21/16	05/26/16	33.0		
Nickel	6020A	0.15	0.08	0.02	5.0	05/21/16	05/26/16	13.7		
Zinc	6020A	0.4	0.4	0.2	5.0	05/21/16	05/26/16	84.2		

% Solids: 98.9

Comments:

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1604717
Date Collected: 05/04/16
Date Received: 05/06/16
Units: mg/Kg
Basis: DRY

Sample Name: FTBL-SED-48-0-6-050416 **Lab Code:** K1604717-012

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.046	0.023	0.009	5.0	05/21/16	05/26/16	0.180		J
Arsenic	6020A	0.47	0.09	0.04	5.0	05/21/16	05/26/16	6.33		
Beryllium	6020A	0.019	0.019	0.005	5.0	05/21/16	05/26/16	0.804		
Copper	6020A	0.09	0.09	0.04	5.0	05/21/16	05/26/16	12.6		J
Lead	6020A	0.05	0.05	0.02	5.0	05/21/16	05/26/16	15.7		
Nickel	6020A	0.19	0.09	0.03	5.0	05/21/16	05/26/16	7.83		
Zinc	6020A	0.5	0.5	0.2	5.0	05/21/16	05/26/16	35.8		

% Solids: 98.7

Comments:

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1604717
Date Collected: 05/04/16
Date Received: 05/06/16
Units: mg/Kg
Basis: DRY

Sample Name: FTBL-SED-49-0-6-050416 **Lab Code:** K1604717-013

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.047	0.023	0.009	5.0	05/21/16	05/26/16	0.470		J
Arsenic	6020A	0.47	0.09	0.04	5.0	05/21/16	05/26/16	9.42		
Beryllium	6020A	0.019	0.019	0.005	5.0	05/21/16	05/26/16	0.930		
Copper	6020A	0.09	0.09	0.04	5.0	05/21/16	05/26/16	16.4		J
Lead	6020A	0.05	0.05	0.02	5.0	05/21/16	05/26/16	41.4		
Nickel	6020A	0.19	0.09	0.03	5.0	05/21/16	05/26/16	9.39		
Zinc	6020A	0.5	0.5	0.2	5.0	05/21/16	05/26/16	41.7		

% Solids: 98.8

Comments:

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1604717
Date Collected: 05/04/16
Date Received: 05/06/16
Units: mg/Kg
Basis: DRY

Sample Name: FTBL-SED-50-0-6-050416 **Lab Code:** K1604717-014

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.045	0.023	0.009	5.0	05/21/16	05/26/16	0.246		J
Arsenic	6020A	0.45	0.09	0.04	5.0	05/21/16	05/26/16	6.80		
Beryllium	6020A	0.018	0.018	0.005	5.0	05/21/16	05/26/16	1.00		
Copper	6020A	0.09	0.09	0.04	5.0	05/21/16	05/26/16	14.1		J
Lead	6020A	0.05	0.05	0.02	5.0	05/21/16	05/26/16	23.8		
Nickel	6020A	0.18	0.09	0.03	5.0	05/21/16	05/26/16	9.03		
Zinc	6020A	0.5	0.5	0.2	5.0	05/21/16	05/26/16	52.4		

% Solids: 99.3

Comments:

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1604717
Date Collected: 05/04/16
Date Received: 05/06/16
Units: mg/Kg
Basis: DRY

Sample Name: FTBL-SED-45-0-6-050416 **Lab Code:** K1604717-015

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.048	0.024	0.010	5.0	05/21/16	05/26/16	1.50		J
Arsenic	6020A	0.48	0.10	0.04	5.0	05/21/16	05/26/16	13.4		
Beryllium	6020A	0.019	0.019	0.005	5.0	05/21/16	05/26/16	0.929		
Copper	6020A	0.10	0.10	0.04	5.0	05/21/16	05/26/16	30.0		J
Lead	6020A	0.05	0.05	0.02	5.0	05/21/16	05/26/16	73.2		
Nickel	6020A	0.19	0.10	0.03	5.0	05/21/16	05/26/16	13.2		
Zinc	6020A	0.5	0.5	0.2	5.0	05/21/16	05/26/16	97.2		

% Solids: 98.7

Comments:

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1604717
Date Collected: 05/04/16
Date Received: 05/06/16
Units: mg/Kg
Basis: DRY

Sample Name: FTBL-SED-44-0-6-050416 **Lab Code:** K1604717-016

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.048	0.024	0.010	5.0	05/21/16	05/26/16	0.899		J
Arsenic	6020A	0.48	0.10	0.04	5.0	05/21/16	05/26/16	8.10		
Beryllium	6020A	0.019	0.019	0.005	5.0	05/21/16	05/26/16	1.04		
Copper	6020A	0.10	0.10	0.04	5.0	05/21/16	05/26/16	21.6		J
Lead	6020A	0.05	0.05	0.02	5.0	05/21/16	05/26/16	20.1		
Nickel	6020A	0.19	0.10	0.03	5.0	05/21/16	05/26/16	32.3		
Zinc	6020A	0.5	0.5	0.2	5.0	05/21/16	05/26/16	115		

% Solids: 99.8

Comments:

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1604717
Date Collected: 05/04/16
Date Received: 05/06/16
Units: mg/Kg
Basis: DRY

Sample Name: FTBL-SED-43-0-6-050416 **Lab Code:** K1604717-017

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.047	0.024	0.009	5.0	05/21/16	05/26/16	0.173		J
Arsenic	6020A	0.47	0.10	0.04	5.0	05/21/16	05/26/16	7.29		
Beryllium	6020A	0.019	0.019	0.005	5.0	05/21/16	05/26/16	0.848		
Copper	6020A	0.10	0.10	0.04	5.0	05/21/16	05/26/16	17.8		J
Lead	6020A	0.05	0.05	0.02	5.0	05/21/16	05/26/16	23.9		
Nickel	6020A	0.19	0.10	0.03	5.0	05/21/16	05/26/16	24.6		
Zinc	6020A	0.5	0.5	0.2	5.0	05/21/16	05/26/16	102		

% Solids: 99.7

Comments:

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1604717
Date Collected: 05/04/16
Date Received: 05/06/16
Units: mg/Kg
Basis: DRY

Sample Name: FTBL-SED-42-0-6-050416 **Lab Code:** K1604717-018

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.041	0.020	0.008	5.0	05/21/16	05/26/16	0.185		J
Arsenic	6020A	0.41	0.08	0.03	5.0	05/21/16	05/26/16	7.63		
Beryllium	6020A	0.016	0.016	0.004	5.0	05/21/16	05/26/16	0.982		
Copper	6020A	0.08	0.08	0.03	5.0	05/21/16	05/26/16	18.1		J
Lead	6020A	0.04	0.04	0.02	5.0	05/21/16	05/26/16	27.2		
Nickel	6020A	0.16	0.08	0.02	5.0	05/21/16	05/26/16	24.3		
Zinc	6020A	0.4	0.4	0.2	5.0	05/21/16	05/26/16	101		

% Solids: 99.8

Comments:

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1604717
Date Collected: 05/04/16
Date Received: 05/06/16
Units: mg/Kg
Basis: DRY

Sample Name: FTBL-SED-41-0-6-050416 **Lab Code:** K1604717-019

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.049	0.024	0.010	5.0	05/21/16	05/26/16	0.299		J
Arsenic	6020A	0.49	0.10	0.04	5.0	05/21/16	05/26/16	9.38		
Beryllium	6020A	0.019	0.019	0.005	5.0	05/21/16	05/26/16	0.855		
Copper	6020A	0.10	0.10	0.04	5.0	05/21/16	05/26/16	23.8		J
Lead	6020A	0.05	0.05	0.02	5.0	05/21/16	05/26/16	32.8		
Nickel	6020A	0.19	0.10	0.03	5.0	05/21/16	05/26/16	32.7		
Zinc	6020A	0.5	0.5	0.2	5.0	05/21/16	05/26/16	129		

% Solids: 100.0

Comments:

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1604717
Date Collected: 05/04/16
Date Received: 05/06/16
Units: mg/Kg
Basis: DRY

Sample Name: FD050416 **Lab Code:** K1604717-020

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.044	0.022	0.009	5.0	05/21/16	05/26/16	0.463		J
Arsenic	6020A	0.44	0.09	0.04	5.0	05/21/16	05/26/16	9.00		
Beryllium	6020A	0.018	0.018	0.004	5.0	05/21/16	05/26/16	0.919		
Copper	6020A	0.09	0.09	0.04	5.0	05/21/16	05/26/16	21.1		J
Lead	6020A	0.04	0.04	0.02	5.0	05/21/16	05/26/16	43.6		
Nickel	6020A	0.18	0.09	0.03	5.0	05/21/16	05/26/16	10.5		
Zinc	6020A	0.4	0.4	0.2	5.0	05/21/16	05/26/16	41.8		

% Solids: 98.4

Comments:

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1604717
Date Collected: 05/05/16
Date Received: 05/06/16
Units: mg/Kg
Basis: DRY

Sample Name: FTBL-SED-31-0-6-050516 **Lab Code:** K1604717-021

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.037	0.019	0.007	5.0	05/21/16	05/26/16	0.130		J
Arsenic	6020A	0.37	0.08	0.03	5.0	05/21/16	05/26/16	5.04		
Beryllium	6020A	0.015	0.015	0.004	5.0	05/21/16	05/26/16	0.923		
Copper	6020A	0.08	0.08	0.03	5.0	05/21/16	05/26/16	11.7		
Lead	6020A	0.04	0.04	0.02	5.0	05/21/16	05/26/16	14.2		
Nickel	6020A	0.15	0.08	0.02	5.0	05/21/16	05/26/16	12.0		
Zinc	6020A	0.4	0.4	0.1	5.0	05/21/16	05/26/16	66.0		

% Solids: 99.1

Comments:

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1604717
Date Collected: 05/05/16
Date Received: 05/06/16
Units: mg/Kg
Basis: DRY

Sample Name: FTBL-SED-32-0-6-050516 **Lab Code:** K1604717-022

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.051	0.025	0.010	5.0	05/21/16	05/26/16	0.352		J
Arsenic	6020A	0.51	0.10	0.04	5.0	05/21/16	05/26/16	7.32		
Beryllium	6020A	0.020	0.020	0.005	5.0	05/21/16	05/26/16	1.39		
Copper	6020A	0.10	0.10	0.04	5.0	05/21/16	05/26/16	28.8		
Lead	6020A	0.05	0.05	0.02	5.0	05/21/16	05/26/16	42.0		
Nickel	6020A	0.20	0.10	0.03	5.0	05/21/16	05/26/16	10.8		
Zinc	6020A	0.5	0.5	0.2	5.0	05/21/16	05/26/16	79.2		

% Solids: 97.9

Comments:

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1604717
Date Collected: 05/05/16
Date Received: 05/06/16
Units: mg/Kg
Basis: DRY

Sample Name: FTBL-SED-33-0-6-050516 **Lab Code:** K1604717-023

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.049	0.024	0.010	5.0	05/21/16	05/26/16	0.176		J
Arsenic	6020A	0.49	0.10	0.04	5.0	05/21/16	05/26/16	4.62		
Beryllium	6020A	0.019	0.019	0.005	5.0	05/21/16	05/26/16	1.02		
Copper	6020A	0.10	0.10	0.04	5.0	05/21/16	05/26/16	11.1		
Lead	6020A	0.05	0.05	0.02	5.0	05/21/16	05/26/16	14.4		
Nickel	6020A	0.20	0.10	0.03	5.0	05/21/16	05/26/16	8.64		
Zinc	6020A	0.5	0.5	0.2	5.0	05/21/16	05/26/16	44.1		

% Solids: 99.7

Comments:

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1604717
Date Collected: 05/05/16
Date Received: 05/06/16
Units: mg/Kg
Basis: DRY

Sample Name: FTBL-SED-34-0-6-050516 **Lab Code:** K1604717-024

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.056	0.028	0.011	5.0	05/21/16	05/26/16	0.135		J
Arsenic	6020A	0.56	0.11	0.05	5.0	05/21/16	05/26/16	5.57		
Beryllium	6020A	0.022	0.022	0.006	5.0	05/21/16	05/26/16	1.43		
Copper	6020A	0.11	0.11	0.05	5.0	05/21/16	05/26/16	7.92		
Lead	6020A	0.06	0.06	0.02	5.0	05/21/16	05/26/16	11.9		
Nickel	6020A	0.23	0.11	0.03	5.0	05/21/16	05/26/16	6.66		
Zinc	6020A	0.6	0.6	0.2	5.0	05/21/16	05/26/16	57.6		

% Solids: 83.2

Comments:

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1604717
Date Collected: 05/05/16
Date Received: 05/06/16
Units: mg/Kg
Basis: DRY

Sample Name: FD050516 **Lab Code:** K1604717-025

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.045	0.022	0.009	5.0	05/21/16	05/26/16	0.156		J
Arsenic	6020A	0.45	0.09	0.04	5.0	05/21/16	05/26/16	5.07		
Beryllium	6020A	0.018	0.018	0.004	5.0	05/21/16	05/26/16	1.23		
Copper	6020A	0.09	0.09	0.04	5.0	05/21/16	05/26/16	11.2		
Lead	6020A	0.05	0.05	0.02	5.0	05/21/16	05/26/16	14.1		
Nickel	6020A	0.18	0.09	0.03	5.0	05/21/16	05/26/16	10.4		
Zinc	6020A	0.4	0.4	0.2	5.0	05/21/16	05/26/16	56.0		

% Solids: 99.9

Comments:

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1604717
Date Collected: 05/05/16
Date Received: 05/06/16
Units: mg/Kg
Basis: DRY

Sample Name: FTBL-SED-35-0-6-050516 **Lab Code:** K1604717-026

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.042	0.021	0.008	5.0	05/21/16	05/26/16	0.445		J
Arsenic	6020A	0.42	0.09	0.03	5.0	05/21/16	05/26/16	15.6		
Beryllium	6020A	0.017	0.017	0.004	5.0	05/21/16	05/26/16	2.81		
Copper	6020A	0.09	0.09	0.03	5.0	05/21/16	05/26/16	44.1		
Lead	6020A	0.04	0.04	0.02	5.0	05/21/16	05/26/16	57.6		
Nickel	6020A	0.17	0.09	0.03	5.0	05/21/16	05/26/16	24.8		
Zinc	6020A	0.4	0.4	0.2	5.0	05/21/16	05/26/16	190		

% Solids: 97.0

Comments:

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Service Request: K1604717
Project No.: 06261038.0000
Date Collected:
Project Name: Castner Range Fort Bliss, TX
Date Received:
Matrix: SOIL
Units: mg/Kg
Basis: DRY

Sample Name: Method Blank
Lab Code: KQ1605097-01

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.050	0.025	0.010	5.0	05/21/16	05/26/16	0.025	U	J
Arsenic	6020A	0.50	0.10	0.04	5.0	05/21/16	05/26/16	0.10	U	
Beryllium	6020A	0.020	0.020	0.005	5.0	05/21/16	05/26/16	0.020	U	
Copper	6020A	0.10	0.10	0.04	5.0	05/21/16	05/26/16	0.10	U	J
Lead	6020A	0.05	0.05	0.02	5.0	05/21/16	05/26/16	0.05	U	
Nickel	6020A	0.20	0.10	0.03	5.0	05/21/16	05/26/16	0.10	U	
Zinc	6020A	0.5	0.5	0.2	5.0	05/21/16	05/26/16	0.5	U	

% Solids: 100.0

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc. **Service Request:** K1604717

Project No.: 06261038.0000 **Date Collected:**

Project Name: Castner Range Fort Bliss, TX **Date Received:**

Matrix: SOIL **Units:** mg/Kg

Basis: DRY

Sample Name: Method Blank **Lab Code:** KQ1605151-01

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.050	0.025	0.010	5.0	05/21/16	05/26/16	0.025	U	J
Arsenic	6020A	0.50	0.10	0.04	5.0	05/21/16	05/26/16	0.10	U	
Beryllium	6020A	0.020	0.020	0.005	5.0	05/21/16	05/26/16	0.020	U	
Copper	6020A	0.10	0.10	0.04	5.0	05/21/16	05/26/16	0.10	U	
Lead	6020A	0.05	0.05	0.02	5.0	05/21/16	05/26/16	0.05	U	
Nickel	6020A	0.20	0.10	0.03	5.0	05/21/16	05/26/16	0.10	U	
Zinc	6020A	0.5	0.5	0.2	5.0	05/21/16	05/26/16	0.5	U	

% Solids: 100.0

Comments:

Metals
- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ARCADIS U.S., Inc. **Service Request:** K1604717

Project No.: 06261038.0000

Project Name: Castner Range Fort Bliss, TX

ICV Source: Inorganic Ventures **CCV Source:** ALS MIXED

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	Method
Antimony	25.0	25.2	101	25.0	25.4	102	24.9	100	6020A
Arsenic	25.0	24.6	98	25.0	25.4	102	24.7	99	6020A
Beryllium	2.5	2.5	100	25.0	24.9	100	25.0	100	6020A
Copper	12.5	12.5	100	25.0	24.9	100	24.2	97	6020A
Lead	25.0	25.5	102	25.0	25.1	100	24.5	98	6020A
Nickel	25.0	24.9	100	25.0	25.3	101	24.0	96	6020A
Zinc	25.0	24.5	98	25.0	24.3	97	24.0	96	6020A

Metals
- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ARCADIS U.S., Inc. **Service Request:** K1604717

Project No.: 06261038.0000

Project Name: Castner Range Fort Bliss, TX

ICV Source: Inorganic Ventures **CCV Source:** ALS MIXED

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	Method
Antimony				25.0	25.5	102	25.3	101	6020A
Arsenic				25.0	25.9	104	25.0	100	6020A
Beryllium				25.0	24.9	100	25.1	100	6020A
Copper				25.0	25.5	102	24.8	99	6020A
Lead				25.0	24.8	99	24.2	97	6020A
Nickel				25.0	25.5	102	24.7	99	6020A
Zinc				25.0	25.9	104	24.8	99	6020A

Metals
- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ARCADIS U.S., Inc. **Service Request:** K1604717

Project No.: 06261038.0000

Project Name: Castner Range Fort Bliss, TX

ICV Source: Inorganic Ventures **CCV Source:** ALS MIXED

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	Method
Antimony				25.0	25.1	100			6020A
Arsenic				25.0	25.0	100			6020A
Beryllium				25.0	25.3	101			6020A
Copper				25.0	24.2	97			6020A
Lead				25.0	23.8	95			6020A
Nickel				25.0	24.3	97			6020A
Zinc				25.0	24.2	97			6020A

Metals

- 2a -

LOW LEVEL INITIAL CALIBRATION AND LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Client: ARCADIS U.S., Inc. **SDG No.:** K1604717

Contract: 06261038.0000 **Lab Code:** CASK **Case No.:** **SAS No.:**

Initial Calibration Source: Inorganic Ventures

Continuing Calibration Source: ALS MIXED

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
LLICVS									
	Antimony	0.109	0.100	109	80.0 - 120.0	MS	05/26/16	09:22	052616A
	Arsenic	0.978	1.000	98	80.0 - 120.0	MS	05/26/16	09:22	052616A
	Beryllium	0.037	0.040	92	80.0 - 120.0	MS	05/26/16	09:22	052616A
	Copper	0.221	0.200	110	80.0 - 120.0	MS	05/26/16	09:22	052616A
	Lead	0.098	0.100	98	80.0 - 120.0	MS	05/26/16	09:22	052616A
	Nickel	0.418	0.400	104	80.0 - 120.0	MS	05/26/16	09:22	052616A
	Zinc	0.916	1.000	92	80.0 - 120.0	MS	05/26/16	09:22	052616A
LLCCVS									
	Antimony	0.120	0.100	120	70.0 - 130.0	MS	05/26/16	11:05	052616A
	Arsenic	0.990	1.000	99	70.0 - 130.0	MS	05/26/16	11:05	052616A
	Beryllium	0.042	0.040	105	70.0 - 130.0	MS	05/26/16	11:05	052616A
	Copper	0.229	0.200	114	70.0 - 130.0	MS	05/26/16	11:05	052616A
	Lead	0.102	0.100	102	70.0 - 130.0	MS	05/26/16	11:05	052616A
	Nickel	0.403	0.400	101	70.0 - 130.0	MS	05/26/16	11:05	052616A
	Zinc	1.079	1.000	108	70.0 - 130.0	MS	05/26/16	11:05	052616A
LLCCVS									
	Antimony	0.109	0.100	109	70.0 - 130.0	MS	05/26/16	12:39	052616A
	Arsenic	1.065	1.000	106	70.0 - 130.0	MS	05/26/16	12:39	052616A
	Beryllium	0.045	0.040	112	70.0 - 130.0	MS	05/26/16	12:39	052616A
	Copper	0.212	0.200	106	70.0 - 130.0	MS	05/26/16	12:39	052616A
	Lead	0.108	0.100	108	70.0 - 130.0	MS	05/26/16	12:39	052616A
	Nickel	0.358	0.400	90	70.0 - 130.0	MS	05/26/16	12:39	052616A
	Zinc	1.189	1.000	119	70.0 - 130.0	MS	05/26/16	12:39	052616A

Metals

- 3 -

BLANKS

Client: ARCADIS U.S., Inc. **Service Request:** K1604717

Project No.: 06261038.0000

Project Name: Castner Range Fort Bliss, TX

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Method
Antimony	0.020	J	0.020	U	0.020	U	0.020	U	6020A
Arsenic	0.08	U	0.08	U	0.08	U	0.08	U	6020A
Beryllium	0.010	U	0.010	U	0.010	U	0.010	U	6020A
Copper	0.08	U	0.08	U	0.08	U	0.08	U	6020A
Lead	0.04	U	0.04	U	0.04	U	0.04	U	6020A
Nickel	0.06	U	0.06	U	0.06	U	0.06	U	6020A
Zinc	0.4	U	0.4	U	0.4	U	0.4	U	6020A

Metals

- 3 -

BLANKS

Client: ARCADIS U.S., Inc. **Service Request:** K1604717

Project No.: 06261038.0000

Project Name: Castner Range Fort Bliss, TX

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Method
Antimony			0.020	U	0.023	J			6020A
Arsenic			0.08	U	0.08	U			6020A
Beryllium			0.010	U	0.012	J			6020A
Copper			0.08	U	0.08	U			6020A
Lead			0.04	U	0.04	U			6020A
Nickel			0.06	U	0.06	U			6020A
Zinc			0.4	U	0.4	U			6020A

Metals

- 4 -

ICP INTERFERENCE CHECK SAMPLE

Client: ARCADIS U.S., Inc. **Service Request:** K1604717

Project No.: 06261038.0000

Project Name: Castner Range Fort Bliss, TX

ICP ID Number: Agilent ICPMS **ICS Source:** Inorganic Ventures

Concentration Units): ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Antimony	0.0		0.0	0.0				
Arsenic	0.0	25.0	0.1	23.0	92			
Beryllium	0.0		0.0	0.0				
Copper	0.0	50.0	0.6	45.2	90			
Lead	0.0		0.1	0.1				
Nickel	0.0	50.0	0.5	45.1	90			
Zinc	0.0	25.0	0.3	22.4	90			

Metals
- 5A -
SPIKE SAMPLE RECOVERY

Client: ARCADIS U.S., Inc. **Service Request:** K1604717

Project No.: 06261038.0000 **Units:** MG/KG

Project Name: Castner Range Fort Bliss, TX **Basis:** DRY

Matrix: SOIL **% Solids:** 99.4

Sample Name: FTBL-SED-51-0-6-050316S **Lab Code:** K1604717-001S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Antimony	72 - 124	34.605		0.237		79.2	43	J	6020A
Arsenic	82 - 118	76.61		4.05		79.2	92		6020A
Beryllium	80 - 120	8.731		0.974		7.9	98		6020A
Copper	84 - 119	49.69		17.27		39.6	82	J	6020A
Lead	84 - 118	110.94		40.93		79.2	88		6020A
Nickel	84 - 119	79.88		8.26		79.2	90		6020A
Zinc	82 - 119	117.9		51.6		79.2	84		6020A

An empty field in the Control Limit column indicates the control limit is not applicabl

Metals
- 5A -
SPIKE SAMPLE RECOVERY

Client: ARCADIS U.S., Inc. **Service Request:** K1604717

Project No.: 06261038.0000 **Units:** MG/KG

Project Name: Castner Range Fort Bliss, TX **Basis:** DRY

Matrix: SOIL **% Solids:** 99.4

Sample Name: FTBL-SED-51-0-6-050316SD **Lab Code:** K1604717-001SD

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Antimony	72 - 124	37.673		0.237		81.8	46	J	6020A
Arsenic	82 - 118	82.49		4.05		81.8	96		6020A
Beryllium	80 - 120	9.341		0.974		8.2	102		6020A
Copper	84 - 119	53.35		17.27		40.9	88		6020A
Lead	84 - 118	116.29		40.93		81.8	92		6020A
Nickel	84 - 119	86.00		8.26		81.8	95		6020A
Zinc	82 - 119	124.7		51.6		81.8	89		6020A

An empty field in the Control Limit column indicates the control limit is not applicabl

Metals
- 5A -
SPIKE SAMPLE RECOVERY

Client: ARCADIS U.S., Inc. **Service Request:** K1604717

Project No.: 06261038.0000 **Units:** MG/KG

Project Name: Castner Range Fort Bliss, TX **Basis:** DRY

Matrix: SOIL **% Solids:** 99.1

Sample Name: FTBL-SED-31-0-6-050516S **Lab Code:** K1604717-021S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Antimony	72 - 124	32.257		0.130		72.6	44	J	6020A
Arsenic	82 - 118	74.44		5.04		72.6	96		6020A
Beryllium	80 - 120	8.491		0.923		7.3	104		6020A
Copper	84 - 119	45.81		11.71		36.3	94		6020A
Lead	84 - 118	81.12		14.16		72.6	92		6020A
Nickel	84 - 119	80.72		12.01		72.6	95		6020A
Zinc	82 - 119	140.7		66.0		72.6	103		6020A

An empty field in the Control Limit column indicates the control limit is not applicabl

Metals
- 5A -
SPIKE SAMPLE RECOVERY

Client: ARCADIS U.S., Inc. **Service Request:** K1604717

Project No.: 06261038.0000 **Units:** MG/KG

Project Name: Castner Range Fort Bliss, TX **Basis:** DRY

Matrix: SOIL **% Solids:** 99.1

Sample Name: FTBL-SED-31-0-6-050516SD **Lab Code:** K1604717-021SD

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Antimony	72 - 124	34.934		0.130		73.1	48	J	6020A
Arsenic	82 - 118	76.63		5.04		73.1	98		6020A
Beryllium	80 - 120	8.610		0.923		7.3	105		6020A
Copper	84 - 119	46.12		11.71		36.6	94		6020A
Lead	84 - 118	84.91		14.16		73.1	97		6020A
Nickel	84 - 119	81.82		12.01		73.1	95		6020A
Zinc	82 - 119	136.8		66.0		73.1	97		6020A

An empty field in the Control Limit column indicates the control limit is not applicabl

Metals
- 5B -
POST SPIKE SAMPLE RECOVERY

Client: ARCADIS U.S., Inc. **Service Request:** K1604717

Project No.: 06261038.0000 **Units:** UG/L

Project Name: Castner Range Fort Bliss, TX **Basis:** DRY

Matrix: WATER

Sample Name: FTBL-SED-51-0-6-050316A **Lab Code:** K1604717-001A

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Antimony	75 - 125	49.707		0.565		50.0	98		6020A
Arsenic	75 - 125	59.17		9.65		50.0	99		6020A
Beryllium	75 - 125	53.312		2.324		50.0	102		6020A
Copper	75 - 125	90.77		41.21		50.0	99		6020A
Lead	75 - 125	148.39		97.63		50.0	102		6020A
Nickel	75 - 125	68.44		19.70		50.0	97		6020A
Zinc	75 - 125	170.7		123.2		50.0	95		6020A

Metals
- 5B -
POST SPIKE SAMPLE RECOVERY

Client: ARCADIS U.S., Inc. **Service Request:** K1604717

Project No.: 06261038.0000 **Units:** UG/L

Project Name: Castner Range Fort Bliss, TX **Basis:** DRY

Matrix: WATER

Sample Name: FTBL-SED-31-0-6-050516A **Lab Code:** K1604717-021A

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Antimony	75 - 125	50.653		0.347		50.0	101		6020A
Arsenic	75 - 125	61.92		13.50		50.0	97		6020A
Beryllium	75 - 125	54.857		2.471		50.0	105		6020A
Copper	75 - 125	78.02		31.33		50.0	93		6020A
Lead	75 - 125	83.67		37.90		50.0	92		6020A
Nickel	75 - 125	78.60		32.14		50.0	93		6020A
Zinc	75 - 125	219.5		176.6		50.0	86		6020A

Metals

- 6 -

DUPLICATES

Client: ARCADIS U.S., Inc. **Service Request:** K1604717

Project No.: 06261038.0000 **Units:** MG/KG

Project Name: Castner Range Fort Bliss, TX **Basis:** DRY

Matrix: SOIL **% Solids:** 99.4

Sample Name: **FTBL-SED-51-0-6-050316SD** **Lab Code:** **K1604717-001SD**

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Antimony	20	34.605		37.673		8.5		6020A
Arsenic	20	76.61		82.49		7.4		6020A
Beryllium	20	8.731		9.341		6.8		6020A
Copper	20	49.69		53.35		7.1		6020A
Lead	20	110.94		116.29		4.7		6020A
Nickel	20	79.88		86.00		7.4		6020A
Zinc	20	117.9		124.7		5.6		6020A

An empty field in the Control Limit column indicates the control limit is not applicable

Form VI - IN

Metals

- 6 -

DUPLICATES

Client: ARCADIS U.S., Inc. **Service Request:** K1604717

Project No.: 06261038.0000 **Units:** MG/KG

Project Name: Castner Range Fort Bliss, TX **Basis:** DRY

Matrix: SOIL **% Solids:** 99.1

Sample Name: **FTBL-SED-31-0-6-050516SD** **Lab Code:** **K1604717-021SD**

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Antimony	20	32.257		34.934		8.0		6020A
Arsenic	20	74.44		76.63		2.9		6020A
Beryllium	20	8.491		8.610		1.4		6020A
Copper	20	45.81		46.12		0.7		6020A
Lead	20	81.12		84.91		4.6		6020A
Nickel	20	80.72		81.82		1.4		6020A
Zinc	20	140.7		136.8		2.8		6020A

An empty field in the Control Limit column indicates the control limit is not applicable

Form VI - IN

Metals

- 7 -

LABORATORY CONTROL SAMPLE

Client: ARCADIS U.S., Inc. **Service Request:** K1604717

Project No.: 06261038.0000

Project Name: Castner Range Fort Bliss, TX

Aqueous LCS Source: **ALS MIXED** **Solid LCS Source:**

Analyte	Aqueous (ug/L)			Solid (mg/kg)				
	True	Found	%R	True	Found	C	Limits	%R
Antimony	1000.0	1020.0	102					
Arsenic	1000.0	1040.0	104					
Beryllium	100.00	99.60	100					
Copper	500.0	514.0	103					
Lead	1000.0	1000.0	100					
Nickel	1000.0	1030.0	103					
Zinc	1000.0	1060.0	106					

Metals

- 7 -

LABORATORY CONTROL SAMPLE

Client: ARCADIS U.S., Inc. **Service Request:** K1604717

Project No.: 06261038.0000

Project Name: Castner Range Fort Bliss, TX

Aqueous LCS Source: **ALS MIXED** **Solid LCS Source:**

Analyte	Aqueous (ug/L)			Solid (mg/kg)				
	True	Found	%R	True	Found	C	Limits	%R
Antimony	1000.0	997.0	100					
Arsenic	1000.0	1010.0	101					
Beryllium	100.00	99.20	99					
Copper	500.0	501.0	100					
Lead	1000.0	954.0	95					
Nickel	1000.0	989.0	99					
Zinc	1000.0	1010.0	101					

Metals

- 9 -
ICP SERIAL DILUTIONS

Client: ARCADIS U.S., Inc. **Service Request:** K1604717

Project No.: 06261038.0000 **Units:** UG/L

Project Name: Castner Range Fort Bliss, TX

Sample Name: **FTBL-SED-51-0-6-050316L** **Lab Code:** **K1604717-001L**

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Antimony	0.565		0.521		7.8		MS
Arsenic	9.65		9.80		1.6		MS
Beryllium	2.320		2.410		3.9		MS
Copper	41.20		42.70		3.6		MS
Lead	97.60		101.00		3.5		MS
Nickel	19.70		20.60		4.6		MS
Zinc	123.0		127.0		3.3		MS

Metals

- 9 -
ICP SERIAL DILUTIONS

Client: ARCADIS U.S., Inc. **Service Request:** K1604717

Project No.: 06261038.0000 **Units:** UG/L

Project Name: Castner Range Fort Bliss, TX

Sample Name: **FTBL-SED-31-0-6-050516L** **Lab Code:** **K1604717-021L**

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Antimony	0.347		0.373	J	7.5		MS
Arsenic	13.50		13.20		2.2		MS
Beryllium	2.470		2.510		1.6		MS
Copper	31.30		33.70		7.7		MS
Lead	37.90		37.50		1.1		MS
Nickel	32.10		32.90		2.5		MS
Zinc	177.0		176.0		0.6		MS

Metals

- 10 -

DETECTION LIMITS

Client: ARCADIS U.S., Inc. **Service Request:** K1604717

Project No.: 06261038.0000

Project Name: Castner Range Fort Bliss, TX

ICP/ICP-MS ID #: **Agilent ICPMS**

GFAA ID #: **AA ID #:**

Analyte	Isotope	Back-ground	LOQ ug/L	LOD ug/L	MDL ug/L	M
Antimony	123		0.100	0.050	0.020	MS
Arsenic	75		1.00	0.20	0.08	MS
Beryllium	9		0.040	0.040	0.010	MS
Copper	65		0.20	0.20	0.08	MS
Lead	208		0.10	0.10	0.04	MS
Nickel	60		0.40	0.20	0.06	MS
Zinc	66		1.0	1.0	0.4	MS

Comments:

Metals

-12-

ICP LINEAR RANGES (QUARTERLY)

Client: ARCADIS U.S., Inc. **Service Request:** K1604717

Project No.: 06261038.0000

Project Name: Castner Range Fort Bliss, TX

ICP ID Number: **Agilent ICPMS**

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Antimony	0.300	2700	6020A
Arsenic	1.000	2700	6020A
Beryllium	1.000	2700	6020A
Copper	0.300	2700	6020A
Lead	0.300	2700	6020A
Nickel	0.300	2700	6020A
Zinc	0.300	2700	6020A

Comments:

Metals
-13-
PREPARATION LOG

Client: ARCADIS U.S., Inc. **Service Request:** K1604717

Project No.: 06261038.0000

Project Name: Castner Range Fort Bliss, TX

Method: MS

Sample ID	Preparation Date	Initial Weight (g)	Final Volume(mL)
K1604717-001	05/21/16	1.20	100.0
K1604717-001S	05/21/16	1.27	100.0
K1604717-001SD	05/21/16	1.23	100.0
K1604717-002	05/21/16	1.33	100.0
K1604717-003	05/21/16	1.43	100.0
K1604717-004	05/21/16	1.50	100.0
K1604717-005	05/21/16	1.33	100.0
K1604717-006	05/21/16	1.20	100.0
K1604717-007	05/21/16	1.18	100.0
K1604717-008	05/21/16	1.03	100.0
K1604717-009	05/21/16	1.28	100.0
K1604717-010	05/21/16	1.16	100.0
K1604717-011	05/21/16	1.35	100.0
K1604717-012	05/21/16	1.09	100.0
K1604717-013	05/21/16	1.08	100.0
K1604717-014	05/21/16	1.11	100.0
K1604717-015	05/21/16	1.05	100.0
K1604717-016	05/21/16	1.04	100.0
K1604717-017	05/21/16	1.06	100.0
K1604717-018	05/21/16	1.23	100.0
K1604717-019	05/21/16	1.03	100.0
K1604717-020	05/21/16	1.16	100.0
KQ1605097-01	05/21/16	1.00	100.0
KQ1605097-02	05/21/16	100.0	100.0

Metals
-13-
PREPARATION LOG

Client: ARCADIS U.S., Inc. **Service Request:** K1604717

Project No.: 06261038.0000

Project Name: Castner Range Fort Bliss, TX

Method: MS

Sample ID	Preparation Date	Initial Weight (g)	Final Volume(mL)
K1604717-021	05/21/16	1.35	100.0
K1604717-021S	05/21/16	1.39	100.0
K1604717-021SD	05/21/16	1.38	100.0
K1604717-022	05/21/16	1.01	100.0
K1604717-023	05/21/16	1.03	100.0
K1604717-024	05/21/16	1.07	100.0
K1604717-025	05/21/16	1.12	100.0
K1604717-026	05/21/16	1.22	100.0
KQ1605151-01	05/21/16	1.00	100.0
KQ1605151-02	05/21/16	100.0	100.0

Metals

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ANALYSIS RUN LOG

Client: ARCADIS U.S., Inc. **Service Request:** K1604717

Project No.: 06261038.0000 **Run Number:** 052616A

Project Name: Castner Range Fort Bliss, TX

Instrument ID Number: Agilent ICPMS **Method:** MS

Start Date: 05/26/16 **End Date:** 05/26/16

Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
Blank	1.0	08:57			X	X							X		X				X							X	
25ppb	1.0	09:02			X	X							X		X				X							X	
ICV	1.0	09:06			X	X							X		X				X							X	
CCV1	1.0	09:10			X	X							X		X				X							X	
ICB1	1.0	09:14			X	X							X		X				X							X	
CCB1	1.0	09:18			X	X							X		X				X							X	
LLICVS	1.0	09:22			X	X							X		X				X							X	
ICS-A1	1.0	09:26			X	X							X		X				X							X	
ICS-AB1	1.0	09:29			X	X							X		X				X							X	
KQ1605097-01	5.0	09:33			X	X							X		X				X							X	
KQ1605097-02	20.0	09:37			X	X							X		X				X							X	
K1604717-001	5.0	09:41			X	X							X		X				X							X	
K1604717-001L	5.0	09:45			X	X							X		X				X							X	
K1604717-001A	1.0	09:49			X	X							X		X				X							X	
K1604717-001S	5.0	09:52			X	X							X		X				X							X	
K1604717-001SD	5.0	09:56			X	X							X		X				X							X	
K1604717-002	5.0	10:00			X	X							X		X				X							X	
K1604717-003	5.0	10:04			X	X							X		X				X							X	
K1604717-004	5.0	10:08			X	X							X		X				X							X	
CCV2	1.0	10:11			X	X							X		X				X							X	
CCB2	1.0	10:15			X	X							X		X				X							X	
K1604717-005	5.0	10:19			X	X							X		X				X							X	
K1604717-006	5.0	10:23			X	X							X		X				X							X	
K1604717-007	5.0	10:27			X	X							X		X				X							X	
K1604717-008	5.0	10:31			X	X							X		X				X							X	
K1604717-009	5.0	10:34			X	X							X		X				X							X	
K1604717-010	5.0	10:38			X	X							X		X				X							X	
K1604717-011	5.0	10:42			X	X							X		X				X							X	
K1604717-012	5.0	10:46			X	X							X		X				X							X	
K1604717-013	5.0	10:50			X	X							X		X				X							X	
K1604717-014	5.0	10:54			X	X							X		X				X							X	
CCV3	1.0	10:57			X	X							X		X				X							X	

*** - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14**

Metals

- 14 -

ANALYSIS RUN LOG

Client: ARCADIS U.S., Inc. **Service Request:** K1604717

Project No.: 06261038.0000 **Run Number:** 052616A

Project Name: Castner Range Fort Bliss, TX

Instrument ID Number: Agilent ICPMS **Method:** MS

Start Date: 05/26/16 **End Date:** 05/26/16

Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CCB3	1.0	11:01			X	X							X		X				X							X	
LLCCVS	1.0	11:05			X	X							X		X				X							X	
K1604717-015	5.0	11:09			X	X							X		X				X							X	
K1604717-016	5.0	11:13			X	X							X		X				X							X	
K1604717-017	5.0	11:17			X	X							X		X				X							X	
K1604717-018	5.0	11:20			X	X							X		X				X							X	
K1604717-019	5.0	11:24			X	X							X		X				X							X	
K1604717-020	5.0	11:28			X	X							X		X				X							X	
KQ1605151-01	5.0	11:32			X	X							X		X				X							X	
KQ1605151-02	20.0	11:36			X	X							X		X				X							X	
K1604717-021	5.0	11:40			X	X							X		X				X							X	
K1604717-021L	5.0	11:43			X	X							X		X				X							X	
CCV4	1.0	11:47			X	X							X		X				X							X	
CCB4	1.0	11:52			X	X							X		X				X							X	
ZZZZZZ	1.0	11:57																									
K1604717-021A	1.0	12:00			X	X							X		X				X							X	
K1604717-021S	5.0	12:04			X	X							X		X				X							X	
K1604717-021SD	5.0	12:08			X	X							X		X				X							X	
K1604717-022	5.0	12:12			X	X							X		X				X							X	
K1604717-023	5.0	12:16			X	X							X		X				X							X	
K1604717-024	5.0	12:20			X	X							X		X				X							X	
K1604717-025	5.0	12:23			X	X							X		X				X							X	
K1604717-026	5.0	12:27			X	X							X		X				X							X	
CCV5	1.0	12:31			X	X							X		X				X							X	
CCB5	1.0	12:35			X	X							X		X				X							X	
LLCCVS	1.0	12:39			X	X							X		X				X							X	

*** - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14**

Metals

15-IN

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: ALS Group USA, Corp. Contract: 06261038.0000

Lab Code: CASK Case No.: _____ NRAS No.: _____ SDG NO.: K1604717

ICP-MS Instrument ID: Agilent ICPMS Start Date: 05/26/2016 End Date: 05/26/2016

Sample No.	Client ID	Time	Internal Standards %RI For:											
			Element Li 6_NG	Q	Element Ge 72_He	Q	Element In115_He	Q	Element Lu175_He	Q	Element	Q	Element	Q
Blank	Blank	0857	100		100		100		100					
25ppb	25ppb	0902	99		106		107		107					
ICV	ICV	0906	99		106		106		106					
CCV1	CCV	0910	99		105		106		107					
ICB1	ICB	0914	95		102		106		105					
CCB1	CCB	0918	100		106		106		106					
LLICVS	LLICVS	0922	99		107		107		107					
ICS-A1	ICSA	0926	91		103		100		104					
ICS-AB1	ICSAB	0929	93		105		102		105					
KQ1605097-01	Method Blank	0933	101		109		111		110					
KQ1605097-02	Lab Control	0937	106		109		115		112					
K1604717-001	FTBL-SED-51-0-6-	0941	98		105		106		108					
K1604717-001L	FTBL-SED-51-0-6-	0945	97		106		107		106					
K1604717-001A	FTBL-SED-51-0-6-	0949	97		107		107		108					
K1604717-001S	FTBL-SED-51-0-6-	0952	96		110		107		110					
K1604717-001SD	FTBL-SED-51-0-6-	0956	97		109		108		110					
K1604717-002	FTBL-SED-51-12-1	1000	98		111		109		110					
K1604717-003	FTBL-SED-36-0-6-	1004	97		110		109		112					
K1604717-004	FTBL-SED-37-0-6-	1008	96		108		107		111					
CCV2	CCV	1011	96		107		105		106					
CCB2	CCB	1015	98		108		110		109					
K1604717-005	FTBL-SED-38-0-6-	1019	99		113		112		113					
K1604717-006	FTBL-SED-39-0-6-	1023	99		112		109		111					
K1604717-007	FTBL-SED-39-12-1	1027	97		109		109		109					
K1604717-008	FTBL-SED-40-0-6-	1031	98		113		109		112					
K1604717-009	FTBL-SED-40-12-1	1034	96		109		108		110					
K1604717-010	FTBL-SED-46-0-6-	1038	96		111		109		111					
K1604717-011	FTBL-SED-47-0-6-	1042	100		115		113		113					
K1604717-012	FTBL-SED-48-0-6-	1046	95		97		97		100					
K1604717-013	FTBL-SED-49-0-6-	1050	96		108		107		111					
K1604717-014	FTBL-SED-50-0-6-	1054	98		110		109		113					
CCV3	CCV	1057	96		109		111		111					
CCB3	CCB	1101	99		109		112		112					
LLCCVS	LLCCVS	1105	98		108		110		110					
K1604717-015	FTBL-SED-45-0-6-	1109	96		108		108		111					
K1604717-016	FTBL-SED-44-0-6-	1113	95		106		106		108					
K1604717-017	FTBL-SED-43-0-6-	1117	100		110		111		113					
K1604717-018	FTBL-SED-42-0-6-	1120	98		111		112		114					
K1604717-019	FTBL-SED-41-0-6-	1124	99		111		111		113					
K1604717-020	FD050416	1128	95		107		109		112					
KQ1605151-01	Method Blank	1132	103		114		115		115					
KQ1605151-02	Lab Control	1136	107		115		118		117					
K1604717-021	FTBL-SED-31-0-6-	1140	99		107		105		108					
K1604717-021L	FTBL-SED-31-0-6-	1143	99		112		110		113					

Metals

15-IN

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: ALS Group USA, Corp. Contract: 06261038.0000

Lab Code: CASK Case No.: NRAS No.: SDG NO.: K1604717

ICP-MS Instrument ID: Agilent ICPMS Start Date: 05/26/2016 End Date: 05/26/2016

Sample No.	Client ID	Time	Internal Standards %RI For:											
			Element Li 6_NG	Q	Element Ge 72_He	Q	Element In115_He	Q	Element Lu175_He	Q	Element	Q	Element	Q
CCV4	CCV	1147	99		110		110		111					
CCB4	CCB	1152	99		110		110		112					
ZZZZZZ	ZZZZZZ	1157												
K1604717-021A	FTBL-SED-31-0-6-	1200	97		110		108		111					
K1604717-021S	FTBL-SED-31-0-6-	1204	96		111		109		113					
K1604717-021SD	FTBL-SED-31-0-6-	1208	96		112		107		111					
K1604717-022	FTBL-SED-32-0-6-	1212	99		108		106		109					
K1604717-023	FTBL-SED-33-0-6-	1216	97		111		109		115					
K1604717-024	FTBL-SED-34-0-6-	1220	98		111		110		113					
K1604717-025	FD050516	1223	97		111		109		114					
K1604717-026	FTBL-SED-35-0-6-	1227	94		110		106		111					
CCV5	CCV	1231	100		113		111		113					
CCB5	CCB	1235	100		111		113		113					
LLCCVS	LLCCVS	1239	99		111		112		111					

Raw Data

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Total Solids

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Benchsheet

Service Request #: K1604717, KQ1604899 **Run #:** 496612
Test: TS **Balance ID:** K-Balance-16
Method: 160.3 Modified

Pan ID:	Lab Code:	Tare (g)	Wet Wt. (g)	Tare + Dry Wt. (g)	Dry Weight (g)	% Total Solids	RPD
	K1604717-001	1.33	10.88	12.15	10.8	99.4	
	K1604717-001DUP	1.32	10.72	12.01	10.7	99.7	<1
	K1604717-002	1.32	11.21	12.20	10.9	97.1	
	K1604717-003	1.32	10.07	11.31	9.99	99.2	
	K1604717-004	1.30	10.14	11.29	9.99	98.5	
	K1604717-005	1.31	10.76	11.83	10.5	97.8	
	K1604717-006	1.31	10.82	11.94	10.6	98.2	
	K1604717-007	1.33	11.66	12.57	11.2	96.4	
	K1604717-008	1.32	11.32	12.65	11.3	100	
	K1604717-009	1.33	10.47	10.21	8.88	84.8	
	K1604717-010	1.33	11.41	12.52	11.2	98.1	
	K1604717-011	1.32	10.74	11.94	10.6	98.9	
	K1604717-011DUP	1.32	10.05	11.27	9.95	99.0	<1
	K1604717-012	1.33	10.95	12.14	10.8	98.7	
	K1604717-013	1.32	10.41	11.60	10.3	98.8	
	K1604717-014	1.33	10.69	11.94	10.6	99.3	
	K1604717-015	1.33	10.40	11.59	10.3	98.7	
	K1604717-016	1.33	10.83	12.14	10.8	99.8	
	K1604717-017	1.33	10.28	11.58	10.3	99.7	
	K1604717-018	1.32	11.43	12.73	11.4	99.8	
	K1604717-019	1.33	11.00	12.33	11.0	100	
	K1604717-020	1.27	10.17	11.28	10.0	98.4	

	Oven ID	Temp In	Temp Out	Date In	Time In	Date Out	Time Out	Thermometer ID
Oven1	k-oven-07	105	105	5/16/2016	17:56	5/17/2016	08:33	

	Cal EQID	Cal Start Value	Cal End Value	Start Date	Start Time	End Date	End Time
Calibration1	K-Balance-16	1.00, 99.99	1.01, 100.00	5/16/2016	17:42	5/16/2016	17:56
Calibration2	K-Balance-16	1.00, 100.01	1.00, 100.01	5/17/2016	09:04	5/17/2016	09:08

Comments: djm Reviewed 5-17-16 L.J.

Benchsheet

Service Request #: K1604717, KQ1604900, K1605068 **Run #:** 496616
Test: TS **Balance ID:** K-Balance-16
Method: 160.3 Modified

Pan ID:	Lab Code:	Tare (g)	Wet Wt. (g)	Tare + Dry Wt. (g)	Dry Weight (g)	% Total Solids	RPD
	K1604717-021	1.32	13.78	14.98	13.7	99.1	
	K1604717-021DUP	1.31	14.28	15.46	14.2	99.1	<1
	K1604717-022	1.31	10.12	11.22	9.91	97.9	
	K1604717-023	1.32	11.55	12.83	11.5	99.7	
	K1604717-024	1.30	10.98	10.43	9.13	83.2	
	K1604717-025	1.30	10.52	11.81	10.5	99.9	
	K1604717-026	1.29	10.74	11.71	10.4	97.0	
	K1605068-001	1.32	11.57	9.61	8.29	71.7	
	K1605068-002	1.31	10.87	10.32	9.01	82.9	
	K1605068-003	1.31	10.26	9.74	8.43	82.2	
	K1605068-004	1.31	11.01	10.26	8.95	81.3	
	K1605068-005	1.32	10.14	9.55	8.23	81.2	
	K1605068-006	1.33	11.26	10.75	9.42	83.7	
	K1605068-006DUP	1.33	10.94	10.60	9.27	84.7	1
	K1605068-007	1.32	12.43	11.15	9.83	79.1	
	K1605068-008	1.35	10.39	10.09	8.74	84.1	
	K1605068-009	1.34	10.86	10.84	9.50	87.5	
	K1605068-010	1.32	10.48	10.89	9.57	91.3	
	K1605068-011	1.33	11.09	11.85	10.5	94.9	
	K1605068-012	1.31	10.20	9.67	8.36	82.0	
	K1605068-012DUP	1.33	10.55	9.94	8.61	81.6	<1
	K1605068-013	1.33	10.40	10.94	9.61	92.4	
	K1605068-014	1.33	11.61	12.06	10.7	92.4	

	Oven ID	Temp In	Temp Out	Date In	Time In	Date Out	Time Out	Thermometer ID
Oven1	k-oven-07	105	105	5/16/2016	18:29	5/17/2016	07:32	

	Cal EQID	Cal Start Value	Cal End Value	Start Date	Start Time	End Date	End Time
Calibration1	K-Balance-16	1.00, 100.01	1.00, 100.00	5/16/2016	18:11	5/16/2016	18:29
Calibration2	K-Balance-16	1.00, 100.00	1.00, 100.01	5/17/2016	08:02	5/17/2016	08:07

Comments: djm Reviewed 5-17-16 L.J.

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Preparation Information Benchsheet

Prep Run: 261931
Team: Metals
Analyst: [redacted]

Prep Workflow: MetDigSICP
Prep Method: EPA 3050B
Rush/NPDES: N/A

Status: Prepped
Current Step: Digestion

Prep Date: 05/21/2016 06:15
Due Date: 05/23/2016
Hold Date: 10/30/2016

Lab Code	Client ID	Bottle #	Initial Amt	Initial Basis	Final Volume	Spike Amt	Spike ID	Comments
KQ1605097-01	Method Blank		1.00 g		100 mL			10% HNO3, 10% HCl
KQ1605097-02	Lab Control Sample				100 mL	1 mL 2 mL 1 mL 1 mL	171671 172201 172203 172509	10% HNO3, 10% HCl
K1604717-001	FTBL-SED-51-0-6-050316	.01	1.20 g	As Received	100 mL			10% HNO3, 10% HCl
K1604717-001: KQ1605097-03	Matrix Spike	.01	1.27 g	As Received	100 mL	1 mL 2 mL 1 mL 1 mL	171671 172201 172203 172509	10% HNO3, 10% HCl
K1604717-001: KQ1605097-04	Duplicate Matrix Spike	.01	1.23 g	As Received	100 mL	1 mL 2 mL 1 mL 1 mL	171671 172201 172203 172509	10% HNO3, 10% HCl
K1604717-002	FTBL-SED-51-12-18-050316	.01	1.33 g	As Received	100 mL			10% HNO3, 10% HCl
K1604717-003	FTBL-SED-36-0-6-050316	.01	1.43 g	As Received	100 mL			10% HNO3, 10% HCl
K1604717-004	FTBL-SED-37-0-6-050316	.01	1.50 g	As Received	100 mL			10% HNO3, 10% HCl
K1604717-005	FTBL-SED-38-0-6-050316	.01	1.33 g	As Received	100 mL			10% HNO3, 10% HCl
K1604717-006	FTBL-SED-39-0-6-050316	.01	1.20 g	As Received	100 mL			10% HNO3, 10% HCl
K1604717-007	FTBL-SED-39-12-18-050316	.01	1.18 g	As Received	100 mL			10% HNO3, 10% HCl
K1604717-008	FTBL-SED-40-0-6-050316	.01	1.03 g	As Received	100 mL			10% HNO3, 10% HCl
K1604717-009	FTBL-SED-40-12-18-050316	.01	1.28 g	As Received	100 mL			10% HNO3, 10% HCl
K1604717-010	FTBL-SED-46-0-6-050416	.01	1.16 g	As Received	100 mL			10% HNO3, 10% HCl
K1604717-011	FTBL-SED-47-0-6-050416	.01	1.35 g	As Received	100 mL			10% HNO3, 10% HCl
K1604717-012	FTBL-SED-48-0-6-050416	.01	1.09 g	As Received	100 mL			10% HNO3, 10% HCl
K1604717-013	FTBL-SED-49-0-6-050416	.01	1.08 g	As Received	100 mL			10% HNO3, 10% HCl
K1604717-014	FTBL-SED-50-0-6-050416	.01	1.11 g	As Received	100 mL			10% HNO3, 10% HCl
K1604717-015	FTBL-SED-45-0-6-050416	.01	1.05 g	As Received	100 mL			10% HNO3, 10% HCl
K1604717-016	FTBL-SED-44-0-6-050416	.01	1.04 g	As Received	100 mL			10% HNO3, 10% HCl
K1604717-017	FTBL-SED-43-0-6-050416	.01	1.06 g	As Received	100 mL			10% HNO3, 10% HCl
K1604717-018	FTBL-SED-42-0-6-050416	.01	1.23 g	As Received	100 mL			10% HNO3, 10%

								HCl
K1604717-019	FTBL-SED-41-0-6-050416	.01	1.03 g	As Received	100 mL			10% HNO3, 10% HCl
K1604717-020	FD050416	.01	1.16 g	As Received	100 mL			10% HNO3, 10% HCl

24 Total Samples consisting of 20 Client Samples, 2 Client QC Samples, 2 Batch QC Samples associated with the current Prep Run.

Spiking Solutions

Name	Type	ID	Expires	Name	Type	ID	Expires
K-MET SS1	Spike	172201	12/1/2016	K-MET SS4	Spike	171671	5/23/2016
K-MET SS3	Spike	172509	7/13/2016	K-MET SS5	Spike	172203	1/28/2017

Preparation Materials

Step	Name	ID	Step	Name	ID
Digestion	Teflon Chips	69101	Digestion	K-MET 100ml Centrifuge Tube	87637
Digestion	K-MET H2O2	84550	Digestion	K-MET HNO3	87968
Digestion	K-MET HCL	87502			

Preparation Hardware / Equipment

Step	Name	Property	Value		Step	Name	Property	Value	
Digestion	K-Balance-02	Date Checked	5/20/16		Digestion	K-BlockDigester-01	Observed Temperature	95	deg C
Digestion	K-BlockDigester-01	Corrected Temperature	95	deg C	Digestion	K-BlockDigester-01	Thermometer ID 1110361		NONE
Digestion	K-BlockDigester-01	Correction Factor	0	deg C	Digestion	K-BlockDigester-01	Thermometer Location	14	NONE

Preparation Steps

Step	Started	Finished	By	Assisted By	Training?	Comments
Digestion	21-MAY-16 06:15	21-MAY-16 09:00	[redacted]		N	

Comments

1R: 15 mins, 2R: 30 mins, 3R: 15 mins.

Review

Reviewed by: _____ [redacted] Date: 5/23/16

Preparation Information Benchsheet

Prep Run: 261995
Team: Metals
Analyst: [redacted]

Prep Workflow: MetDigSICP
Prep Method: EPA 3050B
Rush/NPDES: N/A

Status: Prepped
Current Step: Digestion

Prep Date: 05/21/2016 06:15
Due Date: 05/23/2016
Hold Date: 11/01/2016

Lab Code	Client ID	Bottle #	Initial Amt	Initial Basis	Final Volume	Spike Amt	Spike ID	Comments
KQ1605151-01	Method Blank		1.00 g		100 mL			10% HNO3, 10% HCl
KQ1605151-02	Lab Control Sample				100 mL	1 mL 2 mL 1 mL 1 mL	171671 172201 172203 172509	10% HNO3, 10% HCl
K1604717-021	FTBL-SED-31-0-6-050516	.01	1.35 g	As Received	100 mL			10% HNO3, 10% HCl
K1604717-021: KQ1605151-03	Matrix Spike	.01	1.39 g	As Received	100 mL	1 mL 2 mL 1 mL 1 mL	171671 172201 172203 172509	10% HNO3, 10% HCl
K1604717-021: KQ1605151-04	Duplicate Matrix Spike	.01	1.38 g	As Received	100 mL	1 mL 2 mL 1 mL 1 mL	171671 172201 172203 172509	10% HNO3, 10% HCl
K1604717-022	FTBL-SED-32-0-6-050516	.01	1.01 g	As Received	100 mL			10% HNO3, 10% HCl
K1604717-023	FTBL-SED-33-0-6-050516	.01	1.03 g	As Received	100 mL			10% HNO3, 10% HCl
K1604717-024	FTBL-SED-34-0-6-050516	.01	1.07 g	As Received	100 mL			10% HNO3, 10% HCl
K1604717-025	FD050516	.01	1.12 g	As Received	100 mL			10% HNO3, 10% HCl
K1604717-026	FTBL-SED-35-0-6-050516	.01	1.22 g	As Received	100 mL			10% HNO3, 10% HCl

10 Total Samples consisting of 6 Client Samples, 2 Client QC Samples, 2 Batch QC Samples associated with the current Prep Run.

Spiking Solutions

Name	Type	ID	Expires
K-MET SS1	Spike	172201	12/1/2016
K-MET SS3	Spike	172509	7/13/2016
K-MET SS4	Spike	171671	5/23/2016
K-MET SS5	Spike	172203	1/28/2017

Preparation Materials

Step	Name	ID
Digestion	Teflon Chips	69101
Digestion	K-MET H2O2	84550
Digestion	K-MET HCL	87502
Digestion	K-MET 100ml Centrifuge Tube	87637
Digestion	K-MET HNO3	87968

Preparation Hardware / Equipment

Step	Name	Property	Value	
Digestion	K-Balance-02	Date Checked	5/20/16	
Digestion	K-BlockDigester-01	Corrected Temperature	95	deg C
Digestion	K-BlockDigester-	Correction	0	deg C
Digestion	K-BlockDigester-01	Observed Temperature	95	deg C
Digestion	K-BlockDigester-01	Thermometer ID 1110361		NONE
	K-			

	01	Factor			Digestion	BlockDigester-01	Thermometer Location	14	NONE

Preparation Steps

Step	Started	Finished	By	Assisted By	Training?	Comments
Digestion	21-MAY-16 06:15	21-MAY-16 09:00	[redacted]		N	

Comments

1R: 15 mins, 2R: 30 mins, 3R: 15 mins.

Review

Reviewed by: _____ [redacted] Date: 5/23/16

METALS SPIKING SOLUTIONS CONCENTRATIONS FORM

Solution Name	Element	mLs of 1000ppm Solution	Final Volume	Solution Conc. mg/L	Enter mls Added
K-MET SS1 *** Add after HNO3 and before ALS-89 when making the solution	HNO3	50.0	1000ml	-	
	Al	100*	1000ml	200	
	Ag	100*	1000ml	5	
	Ba	100*	1000ml	100	
	Be	100*	1000ml	5	
	Cd	100*	1000ml	5	
	Co	100*	1000ml	50	
	Cr	100*	1000ml	20	
	Cu	100*	1000ml	25	
	Fe	100*	1000ml	100	
	Pb	100*	1000ml	50	
	Mn	100*	1000ml	50	
	Ni	100*	1000ml	50	
	Sb***	50	1000ml	50	
	V	100*	1000ml	50	
	Zn	100*	1000ml	50	
K-MET SS2	HNO3	25.0	500ml	-	
	As	2.0	500ml	4	
	Cd	2.0	500ml	4	
	Pb	2.0	500ml	4	
	Se	2.0	500ml	4	
	Tl	2.0	500ml	4	
	Cu	2.0	500ml	4	
K-MET SS3	HNO3	25.0	500ml	-	
	As	50.0	500ml	100	
	Se	50.0	500ml	100	
	Tl	10.0	500ml	20	
	Hg	6	500	12	
K-MET SS4	HNO3	25	500ml	-	
	B	50	500ml	100	
	Mo	50	500ml	100	
K-MET SS5	HNO3	10.0	200ml	-	
	K**	20	200ml	1000	
	Na**	20	200ml	1000	
	Mg**	20	200ml	1000	
	Ca**	20	200ml	1000	

K-MET GFLCSW	HNO3	10.0	1000ml	-	
	As, Pb, Se, Tl	5.0	1000ml	2.5	
	Cd	-	-	1.25	
	Cu	2.5	1000ml	2.5	
K-MET QCP-CICV-1	Ca, Mg, Na, K	no dilution	-	2500	
	Al, Ba	no dilution	-	1000	
	Fe	no dilution	-	500	
	Co, Mn, Ni, V, Zn	no dilution	-	250	
	Cu, Ag	no dilution	-	125	
	Cr	no dilution	-	100	
	Be	no dilution	-	25	
K-MET QCP-CICV-3	As, Pb, Se, Tl	no dilution	-	500	
	Cd	no dilution	-	250	

* Denotes volume of mixed stock standard.
** Denotes 10,000 ppm individual stock standards.

Standard	mls of standard	ppm	Logbook #	Exp. Date

Preparation Information Benchsheet

Prep Run: 261931 **Prep Workflow**: MetDigSICP **Status**: Draft **Prep Date**: 05/20/2016 05:54
Team: Metals **Prep Method**: EPA 3050B **Current Step**: Digestion **Due Date**: 05/13/2016
Analyst: [redacted] **Rush/NPDES**: N/A **Hold Date**: 10/30/2016

Lab Code	Client ID	Bottle #	Target Amt	Initial Amt	Initial Basis	Final Volume	Spike Amt	Spike ID	Comments
KQ1605097-01	Method Blank		1.00 g	1.02					
KQ1605097-02	Lab Control Sample		1.00 g	1.20			1 mL 2 mL 1 mL 1 mL	171671 172201 172203 172509	
K1604717-001	FTBL-SED-51-0-6-050316	.01	1.00 g	1.20					
K1604717-001: KQ1605097-03	Matrix Spike	.01	1.00 g	1.27			1 mL 2 mL 1 mL 1 mL	171671 172201 172203 172509	
K1604717-001: KQ1605097-04	Duplicate Matrix Spike	.01	1.00 g	1.23			1 mL 2 mL 1 mL 1 mL	171671 172201 172203 172509	
K1604717-002	FTBL-SED-51-12-18-050316	.01	1.00 g	1.33					
K1604717-003	FTBL-SED-36-0-6-050316	.01	1.00 g	1.43					
K1604717-004	FTBL-SED-37-0-6-050316	.01	1.00 g	1.50					
K1604717-005	FTBL-SED-38-0-6-050316	.01	1.00 g	1.33					
K1604717-006	FTBL-SED-39-0-6-050316	.01	1.00 g	1.20					
K1604717-007	FTBL-SED-39-12-18-050316	.01	1.00 g	~~1.2~~ 5.20	1.18				
K1604717-008	FTBL-SED-40-0-6-050316	.01	1.00 g	1.03					
K1604717-009	FTBL-SED-40-12-18-050316	.01	1.00 g	1.28					
K1604717-010	FTBL-SED-46-0-6-050416	.01	1.00 g	1.16					
K1604717-011	FTBL-SED-47-0-6-050416	.01	1.00 g	1.35					
K1604717-012	FTBL-SED-48-0-6-050416	.01	1.00 g	1.09					
K1604717-013	FTBL-SED-49-0-6-050416	.01	1.00 g	1.08					
K1604717-014	FTBL-SED-50-0-6-050416	.01	1.00 g	1.11					
K1604717-015	FTBL-SED-45-0-6-050416	.01	1.00 g	1.05					
K1604717-016	FTBL-SED-44-0-6-050416	.01	1.00 g	1.04					
K1604717-017	FTBL-SED-43-0-6-050416	.01	1.00 g	1.06					
K1604717-018	FTBL-SED-42-0-6-050416	.01	1.00 g	1.23					

K1604717-019	FTBL-SED-41-0-6-050416	.01	1.00 g	1.03					
K1604717-020	FD050416	.01	1.00 g	1.16					

24 Total Samples consisting of 20 Client Samples, 2 Client QC Samples, 2 Batch QC Samples associated with the current Prep Run.

Spiking Solutions

Name	Type	ID	Expires	Name	Type	ID	Expires
K-MET SS1	Spike	172201	12/1/2016	K-MET SS4	Spike	171671	5/23/2016
K-MET SS3	Spike	172509	7/13/2016	K-MET SS5	Spike	172203	1/28/2017

DDS.D

1- 0615-0630

2- 0645-0715

3- 0845-0900

Preparation Materials

BD (T95 T214

Preparation Hardware / Equipment

Preparation Steps

Step	Started	Finished	By	Assisted By	Training?	Comments
Digestion						

Comments

Preparation Information Benchsheet

Prep Run: 261995 **Prep Workflow:** MetDigSICP **Status:** Draft **Prep Date:** 05/20/2016 14:41
Team: Metals **Prep Method:** EPA 3050B **Current Step:** Digestion **Due Date:** 05/13/2016
Analyst: [redacted] **Rush/NPDES:** N/A **Hold Date:** 11/01/2016

Lab Code	Client ID	Bottle #	Target Amt	Initial Amt	Initial Basis	Final Volume	Spike Amt	Spike ID	Comments
KQ1605151-01	Method Blank		1.00 g	1.07					
KQ1605151-02	Lab Control Sample		1.00 g	1.01			1 mL 2 mL 1 mL 1 mL	171671 172201 172203 172509	
K1604717-021	FTBL-SED-31-0-6-050516	.01	1.00 g	1.35					
K1604717-021: KQ1605151-03	Matrix Spike	.01	1.00 g	1.39			1 mL 2 mL 1 mL 1 mL	171671 172201 172203 172509	
K1604717-021: KQ1605151-04	Duplicate Matrix Spike	.01	1.00 g	1.38			1 mL 2 mL 1 mL 1 mL	171671 172201 172203 172509	
K1604717-022	FTBL-SED-32-0-6-050516	.01	1.00 g	1.01					
K1604717-023	FTBL-SED-33-0-6-050516	.01	1.00 g	1.03					
K1604717-024	FTBL-SED-34-0-6-050516	.01	1.00 g	1.07					
K1604717-025	FD050516	.01	1.00 g	1.12					
K1604717-026	FTBL-SED-35-0-6-050516	.01	1.00 g	1.22					

10 Total Samples consisting of 6 Client Samples, 2 Client QC Samples, 2 Batch QC Samples associated with the current Prep Run.

Spiking Solutions

Name	Type	ID	Expires	Name	Type	ID	Expires
K-MET SS1	Spike	172201	12/1/2016	K-MET SS4	Spike	171671	5/23/2016
K-MET SS3	Spike	172509	7/13/2016	K-MET SS5	Spike	172203	1/28/2017

D005.0
1- 0615-0630
2- 0645-0715
3- 0845-0900

Preparation Materials

BD 1 T95TC14

Preparation Hardware / Equipment

Service Request #	K1604717		
Calibration	052616AMS05		
QC in calibration	052616AMS05		
QC Service Request #	8 K1604717		
STARLIMS run #	49X184 5/26/16		
CAL STD	MS20-41-C ~~MS2039C~~		MS20-39-D
ICV STD	~~39-C~~ ~~MS2041C~~	ICSAB STD	MS20-39-E
LLICV STD	~~40-D~~ MS2040D 5/26/16	INT STD	MS20-29-I

6020 DOD Data Review Form

	Yes	No	NA
1. Mass calibration <0.1 amu?	X		
2. Resolution <0.9 amu at 10% peak height?	X		
3. Stability RSD ≤5% for five replicates?	X		
4. Appropriate standardization completed?	X		
5. ICV within 10% of true value?	X		
6. CCV's within 10% of true?	X		
7. ICB/CCB's <LOD?	X		
8. Initial Low-level cal. check ± 20%	X		
9. ICSA/ICSAB within ± 20%	X		
10. Method blank <½ the LOQ?	X		
11. LCS within 80-120% DoD limit?	X		
12. Spikes within 80-120% DoD limit?	X	X	
13. Duplicate Spike RPD <20% DoD limit?	X		
14. Serial dilution within 10%?	X		
15. Post spike within 80-120% DoD limit?	X		
16. Internal standards within 30-120%?	X		
17. Linear range established with High CCV?	X		
18. Adequate rinse out time allowed?	X		
19. Interferences checked?	X		
20. Se over MRL?		X	
21. Cd Correction Applied?		X	
22. Was run prematurely stopped, If so why?		X	

Comments: LRS=500 ppb.
Sb spikeS are out of control. PDS is in control
.Report & flag

Primary Review by [redacted] Date 5/26/16
Secondary Review by [redacted] Date 5/31/16

R:\icp\misc\data review forms\icpms review form

Data Review Form

Service Request #:	**K1604717**
Instrument ID#:	**K-ICP-MS-05**
DataFile Name:	**R:\ICP\WIP\DATA\K-ICP-MS-05 (Agilent)\052616A.csv**
RUNNO:	**498184**

K1604717-001MS - Metals T

Cu = 84%

MS Recovery

6020A/Metals T - 65 Cu [He] - Recovery: 82 Limits: 84 - 119

6020A/Metals T - 123 Sb [He] - Recovery: 43 Limits: 72 - 124

DOD = ± 20%

K1604717-001DMS - Metals T

DMS Recovery

6020A/Metals T - 123 Sb [He] - Recovery: 46 Limits: 72 - 124

Sb = PDS in CONTROL

K1604717-021MS - Metals T

MS Recovery

6020A/Metals T - 123 Sb [He] - Recovery: 44 Limits: 72 - 124

K1604717-021DMS - Metals T

DMS Recovery

6020A/Metals T - 123 Sb [He] - Recovery: 48 Limits: 72 - 124

Analytical Method 6020A

Primary Approver: [redacted] 5/27/16

Secondary Approver: _____

	Sample						
		Rjct	Data File	Acq. Date-Time	Type	Sample Name	Comment
1			001CALB.	5/26/2016 8:48:09 AM	CalBlk	Rinse	
2			002CALB.	5/26/2016 8:52:51 AM	CalBlk	Prime	
3			003CALB.	5/26/2016 8:57:47 AM	CalBlk	Blank	
4			004CALS.	5/26/2016 9:02:07 AM	CalStd	25ppb	
5			005_ICV.d	5/26/2016 9:06:27 AM	ICV	ICV	
6			006_CCV.	5/26/2016 9:10:46 AM	CCV	CCV	
7			007_ICB.d	5/26/2016 9:14:36 AM	ICB	ICB	
8			008_CCB.	5/26/2016 9:18:26 AM	CCB	CCB	
9			009LICV.d	5/26/2016 9:22:15 AM	LLICV	LLICVS	
10			010ICSA.d	5/26/2016 9:26:07 AM	ICSA	ICSA	
11			011ICSB.d	5/26/2016 9:29:55 AM	ICSB	ICSAB	
12			012_PB.d	5/26/2016 9:33:45 AM	PB	KQ1605097-01	5
13			013_LCS.d	5/26/2016 9:37:34 AM	LCS	KQ1605097-02	20
14			014_ARF.d	5/26/2016 9:41:24 AM	AllRef	K1604717-001	5
15			015SMPL.	5/26/2016 9:45:11 AM	Sample	K1604717-001L	25
16			016_PDS.d	5/26/2016 9:49:02 AM	PDS	K1604717-001A	5
17	✓		017_Spk.d	5/26/2016 9:52:51 AM	Spike	K1604717-001S	5
18	✓		018_Spk.d	5/26/2016 9:56:40 AM	Spike	K1604717-001SD	5
19			019SMPL.	5/26/2016 10:00:27 AM	Sample	K1604717-002	5
20			020SMPL.	5/26/2016 10:04:16 AM	Sample	K1604717-003	5
21			021SMPL.	5/26/2016 10:08:06 AM	Sample	K1604717-004	5
22			022_CCV.	5/26/2016 10:11:58 AM	CCV	CCV	
23			023_CCB.	5/26/2016 10:15:46 AM	CCB	CCB	
24			024SMPL.	5/26/2016 10:19:37 AM	Sample	K1604717-005	5
25			025SMPL.	5/26/2016 10:23:26 AM	Sample	K1604717-006	5
26			026SMPL.	5/26/2016 10:27:16 AM	Sample	K1604717-007	5
27			027SMPL.	5/26/2016 10:31:05 AM	Sample	K1604717-008	5
28			028SMPL.	5/26/2016 10:34:53 AM	Sample	K1604717-009	5
29			029SMPL.	5/26/2016 10:38:42 AM	Sample	K1604717-010	5
30			030SMPL.	5/26/2016 10:42:31 AM	Sample	K1604717-011	5
31			031SMPL.	5/26/2016 10:46:20 AM	Sample	K1604717-012	5
32			032SMPL.	5/26/2016 10:50:10 AM	Sample	K1604717-013	5
33			033SMPL.	5/26/2016 10:54:00 AM	Sample	K1604717-014	5
34			034_CCV.	5/26/2016 10:57:50 AM	CCV	CCV	
35			035_CCB.	5/26/2016 11:01:39 AM	CCB	CCB	

	Sample						
		Rjct	Data File	Acq. Date-Time	Type	Sample Name	Comment
36			036LCCV.	5/26/2016 11:05:30 AM	LLCCV	LLCCVS	
37			037SMPL.	5/26/2016 11:09:21 AM	Sample	K1604717-015	5
38			038SMPL.	5/26/2016 11:13:14 AM	Sample	K1604717-016	5
39			039SMPL.	5/26/2016 11:17:04 AM	Sample	K1604717-017	5
40			040SMPL.	5/26/2016 11:20:54 AM	Sample	K1604717-018	5
41			041SMPL.	5/26/2016 11:24:44 AM	Sample	K1604717-019	5
42			042SMPL.	5/26/2016 11:28:34 AM	Sample	K1604717-020	5
43			043_PB.d	5/26/2016 11:32:23 AM	PB	KQ1605151-01	5
44			044_LCS.d	5/26/2016 11:36:13 AM	LCS	KQ1605151-02	20
45			045_ARF.d	5/26/2016 11:40:01 AM	AllRef	K1604717-021	5
46			046SMPL.	5/26/2016 11:43:51 AM	Sample	K1604717-021L	25
47			047_CCV.	5/26/2016 11:47:42 AM	CCV	CCV	
48			048_CCB.	5/26/2016 11:52:01 AM	CCB	CCB	
49			049SMPL.	5/26/2016 11:57:14 AM	Sample	LRSTD	
50			050_PDS.d	5/26/2016 12:00:58 PM	PDS	K1604717-021A	5
51			051_Spk.d	5/26/2016 12:04:47 PM	Spike	K1604717-021S	5
52			052_Spk.d	5/26/2016 12:08:35 PM	Spike	K1604717-1SD	5
53			053SMPL.	5/26/2016 12:12:24 PM	Sample	K1604717-022	5
54			054SMPL.	5/26/2016 12:16:13 PM	Sample	K1604717-023	5
55			055SMPL.	5/26/2016 12:20:03 PM	Sample	K1604717-024	5
56			056SMPL.	5/26/2016 12:23:54 PM	Sample	K1604717-025	5
57			057SMPL.	5/26/2016 12:27:43 PM	Sample	K1604717-026	5
58			058_CCV.	5/26/2016 12:31:31 PM	CCV	CCV	
59			059_CCB.	5/26/2016 12:35:20 PM	CCB	CCB	
60			060LCCV.	5/26/2016 12:39:10 PM	LLCCV	LLCCVS	
61			061_PB.d	5/26/2016 12:42:59 PM	PB	KQ1605187-01	5
62			062_LCS.d	5/26/2016 12:46:49 PM	LCS	KQ1605187-02	20
63			063_ARF.d	5/26/2016 12:50:37 PM	AllRef	K1605072-001	5
64			064SMPL.	5/26/2016 12:54:37 PM	Sample	K1605072-001L	25
65			065_PDS.d	5/26/2016 12:58:24 PM	PDS	K1605072-001A	5
66			066_Spk.d	5/26/2016 1:02:13 PM	Spike	K1605072-001S	5
67			067_Spk.d	5/26/2016 1:06:02 PM	Spike	K1605072-001SD	5
68			068SMPL.	5/26/2016 1:09:49 PM	Sample	K1605072-002	5
69			069SMPL.	5/26/2016 1:13:37 PM	Sample	K1605072-003	5
70			070SMPL.	5/26/2016 1:17:26 PM	Sample	K1605072-004	5

	Sample						
		Rjct	Data File	Acq. Date-Time	Type	Sample Name	Comment
71			071_CCV.	5/26/2016 1:21:14 PM	CCV	CCV	
72			072_CCB.	5/26/2016 1:25:04 PM	CCB	CCB	
73			073SMPL.	5/26/2016 1:28:54 PM	Sample	K1605072-005	5
74			074SMPL.	5/26/2016 1:32:43 PM	Sample	K1605072-006	5
75			075SMPL.	5/26/2016 1:36:33 PM	Sample	K1605072-007	5
76			076SMPL.	5/26/2016 1:40:24 PM	Sample	K1605072-008	5
77			077SMPL.	5/26/2016 1:44:13 PM	Sample	K1605072-009	5
78			078SMPL.	5/26/2016 1:48:03 PM	Sample	K1605072-010	5
79			079SMPL.	5/26/2016 1:51:51 PM	Sample	K1605072-011	5
80			080SMPL.	5/26/2016 1:55:42 PM	Sample	K1605072-012	5
81			081SMPL.	5/26/2016 1:59:31 PM	Sample	K1605072-013	5
82			082SMPL.	5/26/2016 2:03:21 PM	Sample	K1605072-014	5
83			083_CCV.	5/26/2016 2:07:11 PM	CCV	CCV	
84			084_CCB.	5/26/2016 2:11:01 PM	CCB	CCB	
85			085LCCV.	5/26/2016 2:14:51 PM	LLCCV	LLCCVS	
86			086_QC1.d	5/26/2016 2:18:42 PM	QC1	LLCCVS 2X	
87			087SMPL.	5/26/2016 2:22:33 PM	Sample	LLCCVS 1.0 ppb	
88			088SMPL.	5/26/2016 2:26:23 PM	Sample	K1605072-015	5
89			089SMPL.	5/26/2016 2:30:11 PM	Sample	K1605072-016	5
90			090SMPL.	5/26/2016 2:34:02 PM	Sample	K1605072-017	5
91			091SMPL.	5/26/2016 2:37:52 PM	Sample	K1605072-018	5
92			092SMPL.	5/26/2016 2:41:41 PM	Sample	K1605072-019	5
93			093SMPL.	5/26/2016 2:45:31 PM	Sample	K1605072-020	5
94			094_CCV.	5/26/2016 2:49:20 PM	CCV	CCV	
95			095_CCB.	5/26/2016 2:53:11 PM	CCB	CCB	
96			096LCCV.	5/26/2016 2:57:02 PM	LLCCV	LLCCVS	
97			097_QC1.d	5/26/2016 3:00:51 PM	QC1	LLCCVS 2X	
98			098SMPL.	5/26/2016 3:04:41 PM	Sample	LLCCVS 1.0 ppb	
99			099_PB.d	5/26/2016 3:08:32 PM	PB	KQ1605183-01	5
100			100_LCS.d	5/26/2016 3:12:22 PM	LCS	KQ1605183-02	20
101			101_ARF.d	5/26/2016 3:16:13 PM	AllRef	K1605069-001	5
102			102SMPL.	5/26/2016 3:20:06 PM	Sample	K1605069-001L	25
103			103_PDS.d	5/26/2016 3:23:56 PM	PDS	K1605069-001A	5
104			104_Spk.d	5/26/2016 3:27:45 PM	Spike	K1605069-001S	5
105			105_Spk.d	5/26/2016 3:31:36 PM	Spike	K1605069-001SD	5

Sample

		Rjct	Data File	Acq. Date-Time	Type	Sample Name	Comment
106			106SMPL.	5/26/2016 3:35:25 PM	Sample	K1605069-002	5
107			107SMPL.	5/26/2016 3:39:15 PM	Sample	K1605069-003	5
108			108SMPL.	5/26/2016 3:43:06 PM	Sample	K1605069-004	5
109			109_CCV.	5/26/2016 3:46:55 PM	CCV	CCV	
110			110_CCB.	5/26/2016 3:50:46 PM	CCB	CCB	
111			111SMPL.	5/26/2016 3:54:36 PM	Sample	K1605069-005	5
112			112SMPL.	5/26/2016 3:58:25 PM	Sample	LRSTD	
113			113SMPL.	5/26/2016 4:02:11 PM	Sample	K1605069-006	5
114			114SMPL.	5/26/2016 4:05:59 PM	Sample	K1605069-007	5
115			115SMPL.	5/26/2016 4:09:48 PM	Sample	K1605069-008	5
116			116SMPL.	5/26/2016 4:13:36 PM	Sample	K1605069-009	5
117			117SMPL.	5/26/2016 4:17:25 PM	Sample	K1605069-010	5
118			118SMPL.	5/26/2016 4:21:13 PM	Sample	K1605069-011	5
119			119SMPL.	5/26/2016 4:25:02 PM	Sample	K1605069-012	5
120			120SMPL.	5/26/2016 4:28:54 PM	Sample	LRSTD	
121			121_CCV.	5/26/2016 4:33:29 PM	CCV	CCV	
122			122_CCB.	5/26/2016 4:37:18 PM	CCB	CCB	
123			123LCCV.	5/26/2016 4:41:09 PM	LLCCV	LLCCVS	
124			124LCCV.	5/26/2016 4:45:00 PM	LLCCV	LLCCVS	

Analyte

	Name	Mass	ISTD	Tune Mode
1	Be	9	6	No Gas
2	Ni	60	72	He
3	Ni	62	72	He
4	Cu	63	72	He
5	Cu	65	72	He
6	Zn	66	72	He
7	As	75	72	He
8	Se	77	72	H2
9	Se	78	72	H2
10	Sb	121	115	He
11	Sb	123	115	He
12	[Pb]	206	175	He
13	[Pb]	207	175	He
14	Pb	208	175	He

Analyte					
	Name		Mass	ISTD	Tune Mode
15	Li		6		No Gas
16	Sc		45		No Gas
17	Sc		45		He
18	Sc		45		H2
19	Ge		72		No Gas
20	Ge		72		He
21	Ge		72		H2
22	In		115		He
23	Lu		175		He

RUN terminated Pb out of control

Sample							
		Rjct	Data File	Acq. Date-Time	Type	Sample Name	Comment
125			125SMPL.	5/26/2016 4:52:51 PM	Sample	K1605069-013	5
126			126SMPL.	5/26/2016 4:56:39 PM	Sample	K1605069-014	5
127			127SMPL.	5/26/2016 5:00:28 PM	Sample	K1605069-015	5
128			128SMPL.	5/26/2016 5:04:18 PM	Sample	K1605069-016	5
129			129SMPL.	5/26/2016 5:08:08 PM	Sample	K1605069-017	5
130	✓		130SMPL.	5/26/2016 5:11:57 PM	Sample	K1605069-018	5
131			131SMPL.	5/26/2016 5:15:46 PM	Sample	K1605069-019	5
132			132_PB.d	5/26/2016 5:19:37 PM	PB	KQ1605183-01	5
133			133_LCS.d	5/26/2016 5:23:26 PM	LCS	KQ1605183-02	20
134			134SMPL.	5/26/2016 5:27:17 PM	Sample	K1604894-001	5
135	✓		135_CCV.	5/26/2016 5:31:06 PM	CCV	CCV	
136	✓		136_CCV.	5/26/2016 5:34:55 PM	CCV	CCV	
137	✓		137_CCV.	5/26/2016 5:38:46 PM	CCV	CCV	
138			138_CCB.	5/26/2016 5:42:36 PM	CCB	CCB	
139			139SMPL.	5/26/2016 5:46:26 PM	Sample	K1604894-001D	5
140			140SMPL.	5/26/2016 5:50:16 PM	Sample	K1604894-001L	5
141			141SMPL.	5/26/2016 5:54:05 PM	Sample	K1604894-001A	5
142			142SMPL.	5/26/2016 5:57:54 PM	Sample	K1604894-001S	5
143			143SMPL.	5/26/2016 6:01:42 PM	Sample	K1604894-002	5
144			144SMPL.	5/26/2016 6:05:32 PM	Sample	K1604894-003	5
145			145SMPL.	5/26/2016 6:09:21 PM	Sample	K1604894-004	5
146			146SMPL.	5/26/2016 6:13:11 PM	Sample	K1604894-005	5
147			147SMPL.	5/26/2016 6:17:02 PM	Sample	K1604894-006	5
148			148SMPL.	5/26/2016 6:20:50 PM	Sample	K1604894-007	5

6/27/16

5/26/16

	Sample						
		Rjct	Data File	Acq. Date-Time	Type	Sample Name	Comment
149			149_CCV.	5/26/2016 6:24:41 PM	CCV	CCV	
150			150_CCB.	5/26/2016 6:28:31 PM	CCB	CCB	
151			151SMPL.	5/26/2016 6:32:20 PM	Sample	K1604894-008	5
152			152SMPL.	5/26/2016 6:36:10 PM	Sample	K1604894-009	5
153			153SMPL.	5/26/2016 6:39:59 PM	Sample	K1604894-010	5
154			154SMPL.	5/26/2016 6:43:48 PM	Sample	K1604894-011	5
155			155_CCV.	5/26/2016 6:47:39 PM	CCV	CCV	
156			156_CCB.	5/26/2016 6:51:29 PM	CCB	CCB	
157			157LCCV.	5/26/2016 6:55:19 PM	LLCCV	LLCCVS	
158			158_QC1.d	5/26/2016 6:59:07 PM	QC1	LLCCVS 2X	
159			159SMPL.	5/26/2016 7:02:56 PM	Sample	LLCCVS 1.0 ppb	

US EPA Tune Check Sample Report

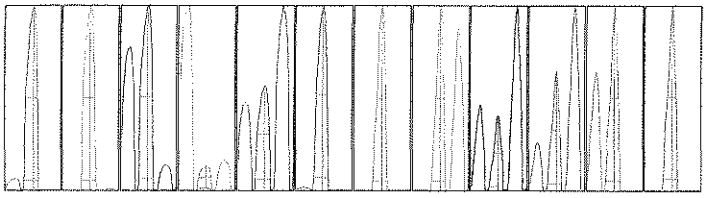
Batch Folder D:\Data\Experiments\052616A.b
Report Comment ALS Tune
Instrument Name G3281A JP13482848

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
7	39084	4.16	5.00	
9	16683	3.98	5.00	
24	93664	4.20	5.00	
25	12778	4.65	5.00	
26	15156	4.84	5.00	
59	162869	3.89	5.00	
115	250638	4.21	5.00	
206	57714	3.56	5.00	
207	51137	4.02	5.00	
208	125882	3.67	5.00	
209	194627	4.04	5.00	
238	250439	3.28	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
7	38307	36582	39941	40408	40182
9	16156	15787	17212	17081	17180
24	91257	87876	96028	96802	96357
25	12311	12048	13155	13491	12882
26	14757	14064	15611	15839	15512
59	158648	153796	166993	168186	166721
115	242626	236188	256462	259051	258865
206	56688	54566	59332	59055	58930
207	50306	47904	52158	52430	52888
208	123320	118962	129510	129306	128311
209	190195	182901	200409	198616	201016
238	246120	237933	256087	256458	255595

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
7	6406	7.05	6.9 - 7.1		0.789	0.900	
9	2798	9.00	8.9 - 9.1		0.785	0.900	
24	15180	23.95	23.9 - 24.1		0.788	0.900	
25	2041	24.95	24.9 - 25.1		0.788	0.900	
26	2442	25.95	25.9 - 26.1		0.807	0.900	
59	28529	58.95	58.9 - 59.1		0.794	0.900	
115	50496	115.00	114.9 - 115.1		0.760	0.900	
206	12469	206.00	205.9 - 206.1		0.746	0.900	
207	10954	207.00	206.9 - 207.1		0.764	0.900	
208	26935	208.00	207.9 - 208.1		0.759	0.900	
209	41486	209.00	208.9 - 209.1		0.753	0.900	
238	52359	238.00	237.9 - 238.1		0.772	0.900	

X% = 5 **Integration Time [sec] =** 0.1 **Acquisition Time [sec] =** 279 **Y Axis =** Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.57	L/min			
RF Matching	1.76	V	Option Gas	0.0	%			
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps			
S/C Temp	2	°C						

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	8.8	V			
Extract 2	-145.0	V	Cell Entrance	-30	V			
Omega Bias	-80	V	Cell Exit	-50	V			
Deflect	11.4	V						

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	false		3rd Gas Flow	0	%			
He Flow	0.0	mL/min	OctP Bias	-8.0	V			
H2 Flow	0.0	mL/min	OctP RF	190	V			
Energy Discrimination	5.0	V						

Calibration Blank Report

Sample Table

Sample Name	Blank
Data File Name	003CALB.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T08:57:47-07:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	Tune Mode	CPS	%RSD
Be	9	No Gas	17	34.60
Ni	60	He	113	4.49
Ni	62	He	29	188.75
Cu	63	He	100	23.33
Cu	65	He	51	7.36
Zn	66	He	41	41.07
As	75	He	6	833.33
Se	77	H2	651	0.84
Se	78	H2	7	597.75
Sb	121	He	79	13.21
Sb	123	He	46	58.84
[Pb]	206	He	87	46.96
[Pb]	207	He	71	16.59
Pb	208	He	336	4.74

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD
Li	6	No Gas	604198	0.26
Ge	72	He	81288	0.70
Ge	72	H2	933781	1.06
In	115	He	717634	0.96
Lu	175	He	2064230	0.17

Calibration Standard Report

Sample Table

Sample Name	25ppb
Data File Name	004CALS.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T09:02:07-07:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	CPS	%RSD
Be	9	No Gas	65047	0.00
Ni	60	He	33985	0.00
Ni	62	He	5394	0.10
Cu	63	He	98885	0.00
Cu	65	He	49694	0.00
Zn	66	He	12578	0.01
As	75	He	7886	0.02
Se	77	H2	5169	0.04
Se	78	H2	14395	0.01
Sb	121	He	52512	0.00
Sb	123	He	42453	0.00
[Pb]	206	He	145751	0.00
[Pb]	207	He	129829	0.00
Pb	208	He	597436	0.00

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	600124	1.37	604198	99.33	30	120	
Ge	72	He	85780	1.65	81288	105.53	30	120	
Ge	72	H2	1015472	1.17	933781	108.75	30	120	
In	115	He	765161	0.15	717634	106.62	30	120	
Lu	175	He	2197620	0.92	2064230	106.46	30	120	

Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICV
Data File Name	005_ICV.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T09:06:27-07:00
Sample Type	ICV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	2.536	2.133	6561	0.79	2.5	101	
Ni	60	He	24.949	1.6S2	34157	1.13	25	100	
Ni	62	He	24.889	3.684	5408	3.56	25	100	
Cu	63	He	12.553	0.778	50061	1.46	12.5	100	
Cu	65	He	12.515	1.417	25079	1.60	12.5	100	
Zn	66	He	24.501	1.884	12418	1.81	25	98	
As	75	He	24.639	1.558	7827	1.19	25	99	
Se	77	H2	25.194	3.152	5126	1.00	25	101	
Se	78	H2	24.734	3.048	14028	1.78	25	99	
Sb	121	He	25.287	0.288	52742	0.76	25	101	
Sb	123	He	25.207	0.438	42502	0.50	25	101	
[Pb]	206	He	24.991	0.114	145500	1.18	25	100	
[Pb]	207	He	25.905	0.822	134334	0.82	25	104	
Pb	208	He	25.494	0.569	608375	0.62	25	102	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	595373	1.45	604198	98.54	30	120	
Ge	72	He	86382	0.89	81288	106.27	30	120	
Ge	72	H2	1000609	1.72	933781	107.16	30	120	
In	115	He	759783	0.53	717634	105.87	30	120	
Lu	175	He	2194419	1.09	2064230	106.31	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	006_CCV.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T09:10:46-07:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	24.867	0.402	64335	0.03	25	99	
Ni	60	He	25.308	2.506	34316	1.78	25	101	
Ni	62	He	25.731	1.413	5536	1.07	25	103	
Cu	63	He	25.087	1.319	98993	1.45	25	100	
Cu	65	He	24.884	1.280	49337	0.55	25	100	
Zn	66	He	24.286	2.827	12193	3.01	25	97	
As	75	He	25.390	1.282	7989	0.42	25	102	
Se	77	H2	25.559	2.773	5219	2.01	25	102	
Se	78	H2	24.781	0.186	14134	0.77	25	99	
Sb	121	He	25.343	0.481	52920	0.98	25	101	
Sb	123	He	25.376	0.535	42838	0.89	25	102	
[Pb]	206	He	25.118	1.218	147384	0.45	25	100	
[Pb]	207	He	25.316	1.258	132326	1.19	25	101	
Pb	208	He	25.095	1.118	603589	0.43	25	100	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	596637	0.39	604198	98.75	30	120	
Ge	72	He	85564	0.94	81288	105.26	30	120	
Ge	72	H2	1005933	0.64	933781	107.73	30	120	
In	115	He	760665	0.57	717634	106.00	30	120	
Lu	175	He	2211789	0.78	2064230	107.15	30	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB
Data File Name	007_ICB.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T09:14:36-07:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	0.001	76.3	18	8.3	0.04	
Ni	60	He	-0.001	-3395.3	114	29.2	0.2	
Ni	62	He	-0.013	-233.1	27	21.7	0.2	
Cu	63	He	0.001	385.9	108	20.6	0.2	
Cu	65	He	0.000	4948.8	53	59.6	0.2	
Zn	66	He	0.005	341.2	44	18.9	1	
As	75	He	-0.003	-410.6	5	65.8	0.25	
Se	77	H2	-0.029	-966.6	684	8.7	20	
Se	78	H2	0.003	126.5	10	26.0	0.5	
Sb	121	He	0.005	115.4	94	12.1	0.2	
Sb	123	He	0.020	40.6	83	17.1	0.05	
[Pb]	206	He	-0.001	-371.8	86	22.2	0.1	
[Pb]	207	He	-0.004	-112.3	57	36.7	0.1	
Pb	208	He	-0.001	-25.0	324	2.1	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	575492	0.70	604198	95.25	30	120	
Ge	72	He	83248	2.28	81288	102.41	30	120	
Ge	72	H2	987725	2.03	933781	105.78	30	120	
In	115	He	758596	1.08	717634	105.71	30	120	
Lu	175	He	2163195	0.98	2064230	104.79	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	00B_CCB.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T09:1B:26-07:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	-0.002	-128.0	12	46.1	0.04	
Ni	60	He	0.006	61.5	129	5.4	0.2	
Ni	62	He	0.056	209.8	42	57.1	0.2	
Cu	63	He	-0.001	-105.6	101	5.0	0.2	
Cu	65	He	-0.009	-66.9	37	32.8	0.2	
Zn	66	He	0.009	444.0	48	39.7	1	
As	75	He	0.001	1541.6	7	85.3	0.25	
Se	77	H2	-0.213	-136.0	663	9.1	20	
Se	78	H2	-0.009	-35.9	3	57.7	0.5	
Sb	121	He	-0.009	-47.7	65	13.6	0.2	
Sb	123	He	-0.002	-201.2	46	14.8	0.05	
[Pb]	206	He	-0.002	-91.2	80	15.0	0.1	
[Pb]	207	He	-0.004	-129.4	56	48.1	0.1	
Pb	208	He	-0.003	-51.2	282	15.0	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	601193	1.38	604198	99.50	30	120	
Ge	72	He	86117	1.91	81288	105.94	30	120	
Ge	72	H2	1004321	1.38	933781	107.55	30	120	
In	115	He	761251	0.11	717634	106.08	30	120	
Lu	175	He	2185474	1.83	2064230	105.87	30	120	

Low Level Initial Calibration Verification (LLICV) Report

Sample Table

Sample Name	LLICVS
Data File Name	009LICV.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T09:22:15-07:00
Sample Type	LLICV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	0.037	23.875	112	20.10	0.04	92	
Ni	60	He	0.418	4.080	693	1.27	0.4	105	
Ni	62	He	0.469	12.131	132	7.27	0.4	117	
Cu	63	He	0.203	3.081	917	4.47	0.2	101	
Cu	65	He	0.221	7.164	499	6.49	0.2	111	
Zn	66	He	0.916	8.122	508	6.61	1	92	
As	75	He	0.978	2.889	318	2.27	1	98	
Se	77	H2	1.914	3.784	1043	1.14	2	96	
Se	78	H2	1.997	3.928	1151	4.24	2	100	
Sb	121	He	0.099	20.559	294	13.66	0.1	99	
Sb	123	He	0.109	14.679	235	10.59	0.1	109	
[Pb]	206	He	0.098	3.997	664	3.07	0.1	98	
[Pb]	207	He	0.102	4.724	607	3.96	0.1	102	
Pb	208	He	0.098	4.536	2712	4.77	0.1	98	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	599045	0.29	604198	99.15	30	120	
Ge	72	He	86713	2.10	81288	106.67	30	120	
Ge	72	H2	1009583	0.45	933781	108.12	30	120	
In	115	He	768918	1.02	717634	107.15	30	120	
Lu	175	He	2206597	1.80	2064230	106.90	30	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA
Data File Name	010ICSA.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T09:26:07-07:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	QC Flag
Be	9	No Gas	0.001	164.7	17	12.5	
Ni	60	He	0.462	8.1	727	6.4	
Ni	62	He	0.362	29.0	106	21.5	
Cu	63	He	0.566	7.6	2286	7.8	
Cu	65	He	0.579	11.4	1172	10.0	
Zn	66	He	0.309	29.5	193	22.4	
As	75	He	0.053	8.4	22	5.2	
Se	77	H2	0.706	24.7	768	2.8	
Se	78	H2	0.003	277.8	9	50.9	
Sb	121	He	0.000	1904.7	79	12.3	
Sb	123	He	0.018	16.2	74	5.6	
[Pb]	206	He	0.067	16.3	469	12.4	
[Pb]	207	He	0.065	6.0	401	5.1	
Pb	208	He	0.067	3.3	1906	1.7	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	549077	0.54	604198	90.88	30	120	
Ge	72	He	83658	0.97	81288	102.92	30	120	
Ge	72	H2	935502	1.40	933781	100.18	30	120	
In	115	He	718552	0.52	717634	100.13	30	120	
Lu	175	He	2136932	1.03	2064230	103.52	30	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB
Data File Name	011ICSB.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T09:29:55-07:00
Sample Type	ICSB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	0.000	-226.683	15	11.55	-1	0.0	
Ni	60	He	45.145	0.440	61083	0.87	50	90.3	
Ni	62	He	46.326	1.128	9936	0.74	50	92.7	
Cu	63	He	44.871	0.673	176840	0.74	50	89.7	
Cu	65	He	45.209	0.484	89531	0.94	50	90.4	
Zn	66	He	22.411	1.847	11246	1.34	25	89.6	
As	75	He	22.963	0.328	7221	0.29	25	91.9	
Se	77	H2	24.379	5.777	4963	3.86	25	97.5	
Se	78	H2	23.454	1.654	13253	0.75	25	93.8	
Sb	121	He	0.008	151.391	95	23.73	-1	-0.8	
Sb	123	He	0.013	12.910	68	3.76	-1	-1.3	
[Pb]	206	He	0.064	15.464	461	10.43	-1	-6.4	
[Pb]	207	He	0.073	12.849	451	7.90	-1	-7.3	
Pb	208	He	0.073	12.359	2068	6.82	-1	-7.3	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	562762	1.35	604198	93.14	30	120	
Ge	72	He	85498	0.49	81288	105.18	30	120	
Ge	72	H2	996635	1.17	933781	106.73	30	120	
In	115	He	728355	0.24	717634	101.49	30	120	
Lu	175	He	2175406	3.93	2064230	105.39	30	120	

Prep Blank (PB) Report

Sample Table

Sample Name	KQ1605097-01
Data File Name	012_PB.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T09:33:45-07:00
Sample Type	PB
Dilution	1
Comment	5
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	-0.003	-44.1	10	29.6	0.04	
Ni	60	He	0.056	48.2	201	19.1	0.2	
Ni	62	He	0.045	233.8	41	55.2	0.2	
Cu	63	He	0.013	33.1	163	10.6	0.2	
Cu	65	He	0.008	44.9	71	10.8	0.2	
Zn	66	He	0.350	24.9	226	19.2	1	
As	75	He	0.004	186.4	8	27.2	0.25	
Se	77	H2	-0.191	-31.4	678	0.2	2	
Se	78	H2	0.000	-4958.6	8	21.7	0.5	
Sb	121	He	-0.015	-34.2	55	19.9	0.1	
Sb	123	He	-0.001	-529.1	49	19.2	0.05	
[Pb]	206	He	0.012	23.6	167	11.1	0.1	
[Pb]	207	He	0.014	33.6	156	17.5	0.1	
Pb	208	He	0.012	21.3	674	10.6	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	609757	1.68	604198	100.92	30	120	
Ge	72	He	88494	1.04	81288	108.87	30	120	
Ge	72	H2	1021339	1.47	933781	109.38	30	120	
In	115	He	796149	0.39	717634	110.94	30	120	
Lu	175	He	2267269	1.08	2064230	109.84	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	KQ1605097-02
Data File Name	013_LCS.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T09:37:34-07:00
Sample Type	LCS
Dilution	1
Comment	20
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	4.981	0.387	13804	1.44	5	99.6	
Ni	60	He	51.374	0.851	72060	0.33	50	102.7	
Ni	62	He	51.298	0.482	11406	0.79	50	102.6	
Cu	63	He	25.592	0.675	104632	0.54	25	102.4	
Cu	65	He	25.713	0.758	52824	0.68	25	102.9	
Zn	66	He	52.756	1.809	27393	2.14	50	105.5	
As	75	He	51.920	0.696	16921	0.71	50	103.8	
Se	77	H2	53.899	2.184	10267	1.06	50	107.8	
Se	78	H2	52.356	1.294	29965	1.07	50	104.7	
Sb	121	He	51.040	0.992	115034	0.71	50	102.1	
Sb	123	He	50.861	0.863	92694	0.53	50	101.7	
[Pb]	206	He	49.069	2.042	301684	0.75	50	98.1	
[Pb]	207	He	50.984	1.935	279225	0.72	50	102.0	
Pb	208	He	50.155	2.066	1263993	0.99	50	100.3	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	638442	1.75	604198	105.67	30	120	
Ge	72	He	88656	0.53	81288	109.06	30	120	
Ge	72	H2	1009761	1.02	933781	108.14	30	120	
In	115	He	821705	0.37	717634	114.50	30	120	
Lu	175	He	2318626	1.85	2064230	112.32	30	120	

All Reference Sample Report

Sample Table

Sample Name	K1604717-001
Data File Name	014_ARF.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T09:41:24-07:00
Sample Type	AllRef
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	2.324	1.45	5980	0.04	
Ni	60	He	19.700	0.35	26722	0.07	
Ni	62	He	20.745	4.75	4465	0.46	
Cu	63	He	41.451	0.99	163358	0.03	
Cu	65	He	41.207	1.20	81601	0.05	
Zn	66	He	123.192	1.06	61626	0.20	
As	75	He	9.652	0.83	3039	0.32	
Se	77	H2	1.733	10.29	983	0.18	
Se	78	H2	0.408	7.94	234	0.17	
Sb	121	He	0.543	2.15	1219	0.04	
Sb	123	He	0.565	1.83	1005	0.06	
[Pb]	206	He	99.048	0.84	582724	0.02	
[Pb]	207	He	96.423	1.05	505333	0.02	
Pb	208	He	97.634	0.96	2354547	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	591999	2.18	604198	97.98	30	120	
Ge	72	He	85496	0.97	81288	105.18	30	120	
Ge	72	H2	981125	1.56	933781	105.07	30	120	
In	115	He	763022	0.48	717634	106.32	30	120	
Lu	175	He	2218667	0.90	2064230	107.48	30	120	

Sample Report

Sample Table

Sample Name	K1604717-001L
Data File Name	015SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T09:45:11-07:00
Sample Type	Sample
Dilution	1
Comment	25
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	0.483	3.04	1248	0.04	
Ni	60	He	4.128	3.14	5721	0.07	
Ni	62	He	4.383	9.14	972	0.45	
Cu	63	He	8.588	0.66	34095	0.03	
Cu	65	He	8.547	0.40	17052	0.05	
Zn	66	He	25.353	4.19	12778	0.20	
As	75	He	1.959	11.30	625	0.31	
Se	77	H2	0.154	50.82	729	0.02	
Se	78	H2	0.059	10.76	41	0.14	
Sb	121	He	0.098	18.84	289	0.03	
Sb	123	He	0.104	15.00	226	0.05	
[Pb]	206	He	20.405	1.00	118465	0.02	
[Pb]	207	He	19.890	1.33	102856	0.02	
Pb	208	He	20.135	1.06	479137	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	588422	1.12	604198	97.39	30	120	
Ge	72	He	85907	0.38	81288	105.68	30	120	
Ge	72	H2	1006966	1.04	933781	107.84	30	120	
In	115	He	764719	1.02	717634	106.56	30	120	
Lu	175	He	2187884	0.74	2064230	105.99	30	120	

Post Digestion Spike Sample (PDS) Report

Sample Table

Sample Name	K1604717-001A
Data File Name	016_PDS.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T09:49:02-07:00
Sample Type	PDS
Dilution	1
Comment	5
QC Ref File Name	014_ARF.d
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Spk Amt	%Rec	QC Flag
Be	9	No Gas	53.312	0.826	136009	0.96	50	102	
Ni	60	He	68.441	0.924	93936	1.01	50	97	
Ni	62	He	69.036	2.410	15015	2.36	50	97	
Cu	63	He	90.096	0.536	360326	0.85	50	97	
Cu	65	He	90.775	0.999	182414	0.66	50	99	
Zn	66	He	170.663	1.146	86643	0.76	50	95	
As	75	He	59.168	1.608	18875	1.12	50	99	
Se	77	H2	51.689	1.505	9828	1.54	50	100	
Se	78	H2	49.293	1.560	28075	0.61	50	98	
Sb	121	He	50.040	0.972	105666	0.10	50	99	
Sb	123	He	49.707	1.321	84873	0.42	50	98	
[Pb]	206	He	149.976	0.988	883164	0.88	50	102	
[Pb]	207	He	148.049	1.355	776592	0.81	50	103	
Pb	208	He	148.393	0.573	3582136	1.19	50	102	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	588453	1.46	604198	97.39	30	120	
Ge	72	He	86787	0.51	81288	106.76	30	120	
Ge	72	H2	1004884	1.07	933781	107.61	30	120	
In	115	He	769879	0.99	717634	107.28	30	120	
Lu	175	He	2220982	1.76	2064230	107.59	30	120	

Matrix Spike Sample (MS) Report

Sample Table

Sample Name	K1604717-001S
Data File Name	017_Spk.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T09:52:51-07:00
Sample Type	Spike
Dilution	1
Comment	5
QC Ref File Name	014_ARF.d
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Spk Amt	%Rec	QC Flag
Be	9	No Gas	22.045	1.120	55354	0.58	20	99	
Ni	60	He	201.689	2.727	283517	1.22	200	91	
Ni	62	He	202.255	2.484	45035	1.23	200	91	
Cu	63	He	125.152	2.680	513029	1.11	100	84	
Cu	65	He	125.445	1.829	258414	0.28	100	84	
Zn	66	He	297.605	1.913	154860	0.53	200	87	
As	75	He	193.412	1.447	63242	0.28	200	92	
Se	77	H2	193.085	1.910	34714	0.62	200	96	
Se	78	H2	186.269	2.094	105822	0.76	200	93	
Sb	121	He	87.922	0.715	184749	0.21	200	44	Flag
Sb	123	He	87.369	1.501	148458	0.69	200	43	Flag
[Pb]	206	He	284.064	0.422	1703256	0.41	200	93	
[Pb]	207	He	280.200	1.025	1496593	0.50	200	92	
Pb	208	He	280.108	1.575	6884261	0.90	200	91	

PDJ OK.

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	579112	1.64	604198	95.85	30	120	
Ge	72	He	88987	1.55	81288	109.47	30	120	
Ge	72	H2	1002645	1.48	933781	107.37	30	120	
In	115	He	766353	0.82	717634	106.79	30	120	
Lu	175	He	2261366	0.73	2064230	109.55	30	120	

Matrix Spike Sample (MS) Report

Sample Table

Sample Name	K1604717-001SD
Data File Name	018_Spk.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T09:56:40-07:00
Sample Type	Spike
Dilution	1
Comment	5
QC Ref File Name	014_ARF.d
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Spk Amt	%Rec	QC Flag
Be	9	No Gas	22.841	2.484	58198	1.07	20	103	
Ni	60	He	210.288	0.565	294407	0.81	200	95	
Ni	62	He	212.632	1.256	47149	0.55	200	96	
Cu	63	He	130.944	0.591	534589	0.20	100	89	
Cu	65	He	130.454	0.970	267611	0.23	100	89	
Zn	66	He	304.972	1.021	158032	0.33	200	91	
As	75	He	201.708	1.234	65676	0.72	200	96	
Se	77	H2	200.314	2.837	36201	1.33	200	99	
Se	78	H2	193.872	0.879	110819	0.56	200	97	
Sb	121	He	92.130	1.157	195067	0.45	200	46	Flag
Sb	123	He	92.120	0.907	157735	0.17	200	46	Flag
[Pb]	206	He	290.471	0.187	1747744	1.00	200	96	
[Pb]	207	He	282.495	1.239	1514026	0.08	200	93	
Pb	208	He	284.367	1.353	7013043	0.35	200	93	

PDS OK

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	587812	2.73	604198	97.29	30	120	
Ge	72	He	88604	0.74	81288	109.00	30	120	
Ge	72	H2	1008693	1.43	933781	108.02	30	120	
In	115	He	772226	0.74	717634	107.61	30	120	
Lu	175	He	2269241	1.18	2064230	109.93	30	120	

Sample Report

Sample Table

Sample Name	K1604717-002
Data File Name	019SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T10:00:27-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	2.862	2.55	7349	0.04	
Ni	60	He	26.217	2.28	37375	0.07	
Ni	62	He	26.259	1.48	5941	0.44	
Cu	63	He	62.634	1.47	259698	0.02	
Cu	65	He	62.916	1.98	131076	0.05	
Zn	66	He	159.606	1.53	84000	0.19	
As	75	He	13.583	1.70	4497	0.30	
Se	77	H2	2.264	9.80	1103	0.21	
Se	78	H2	0.475	17.61	279	0.17	
Sb	121	He	1.050	1.21	2343	0.04	
Sb	123	He	1.017	2.86	1819	0.06	
[Pb]	206	He	161.453	2.02	968879	0.02	
[Pb]	207	He	157.856	1.67	843862	0.02	
Pb	208	He	160.666	1.49	3952265	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	591083	1.30	604198	97.83	30	120	
Ge	72	He	89973	1.20	81288	110.68	30	120	
Ge	72	H2	100735S	1.94	933781	107.88	30	120	
In	115	He	784229	0.35	717634	109.28	30	120	
Lu	175	He	2263321	0.79	2064230	109.64	30	120	

Sample Report

Sample Table

Sample Name	K1604717-003
Data File Name	020SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T10:04:16-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	4.625	2.29	11743	0.04	
Ni	60	He	75.086	1.08	106038	0.07	
Ni	62	He	75.442	0.57	16884	0.45	
Cu	63	He	93.639	1.32	385374	0.02	
Cu	65	He	94.262	0.79	194935	0.05	
Zn	66	He	242.892	0.48	126885	0.19	
As	75	He	20.420	1.71	6709	0.30	
Se	77	H2	4.369	9.69	1485	0.29	
Se	78	H2	0.846	2.91	494	0.17	
Sb	121	He	0.641	1.87	1462	0.04	
Sb	123	He	0.642	4.45	1165	0.06	
[Pb]	206	He	94.413	1.82	579320	0.02	
[Pb]	207	He	91.605	2.01	500700	0.02	
Pb	208	He	92.928	1.87	2337320	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	585023	1.98	604198	96.83	30	120	
Ge	72	He	89316	1.30	81288	109.88	30	120	
Ge	72	H2	1013554	0.72	933781	108.54	30	120	
In	115	He	783096	0.66	717634	109.12	30	120	
Lu	175	He	2314344	1.77	2064230	112.12	30	120	

Sample Report

Sample Table

Sample Name	K1604717-004
Data File Name	021SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T10:08:06-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	3.978	1.32	9993	0.04	
Ni	60	He	29.825	0.68	41613	0.07	
Ni	62	He	30.087	5.12	6657	0.45	
Cu	63	He	55.614	1.16	225741	0.02	
Cu	65	He	56.153	0.96	114533	0.05	
Zn	66	He	181.934	1.10	93727	0.19	
As	75	He	18.869	2.13	6112	0.31	
Se	77	H2	3.267	4.65	1266	0.26	
Se	78	H2	0.646	10.01	372	0.17	
Sb	121	He	0.783	0.97	1730	0.05	
Sb	123	He	0.850	5.04	1495	0.06	
[Pb]	206	He	67.407	2.77	407433	0.02	
[Pb]	207	He	65.030	1.62	350208	0.02	
Pb	208	He	65.883	2.33	1632485	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	578646	1.73	604198	95.77	30	120	
Ge	72	He	88074	1.16	81288	108.35	30	120	
Ge	72	H2	995900	1.36	933781	106.65	30	120	
In	115	He	766948	0.37	717634	106.87	30	120	
Lu	175	He	2280178	2.42	2064230	110.46	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	022_CCV.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T10:11:58-07:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	25.040	0.453	63197	1.11	25	100	
Ni	60	He	24.018	2.335	33014	2.18	25	96	
Ni	62	He	24.062	3.596	5250	3.97	25	96	
Cu	63	He	24.201	1.142	96794	2.18	25	97	
Cu	65	He	24.188	0.623	48621	3.01	25	97	
Zn	66	He	23.985	2.902	12212	5.27	25	96	
As	75	He	24.680	1.618	7873	3.55	25	99	
Se	77	H2	24.747	2.031	4917	2.73	25	99	
Se	78	H2	24.220	1.813	13380	1.09	25	97	
Sb	121	He	25.177	0.765	52232	3.47	25	101	
Sb	123	He	24.945	1.924	41818	0.93	25	100	
[Pb]	206	He	24.484	0.243	141792	2.78	25	98	
[Pb]	207	He	24.820	0.213	128035	2.66	25	99	
Pb	208	He	24.537	0.292	582450	2.71	25	98	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	582022	0.81	604198	96.33	30	120	
Ge	72	He	86729	2.39	81288	106.69	30	120	
Ge	72	H2	974430	1.33	933781	104.35	30	120	
In	115	He	755638	2.83	717634	105.30	30	120	
Lu	175	He	2182851	2.87	2064230	105.75	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	023_CCB.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T10:15:46-07:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	0.002	56.5	22	11.6	0.04	
Ni	60	He	0.005	477.7	130	26.8	0.2	
Ni	62	He	0.055	80.5	43	23.1	0.2	
Cu	63	He	0.001	531.0	112	18.9	0.2	
Cu	65	He	0.009	182.8	74	46.6	0.2	
Zn	66	He	0.056	54.1	73	20.8	1	
As	75	He	-0.005	-66.8	5	20.0	0.25	
Se	77	H2	-0.114	-64.5	693	2.5	20	
Se	78	H2	0.000	-4935.0	8	45.1	0.5	
Sb	121	He	0.000	-11738.1	86	28.1	0.2	
Sb	123	He	0.016	45.9	79	17.2	0.05	
[Pb]	206	He	0.005	60.9	123	14.3	0.1	
[Pb]	207	He	0.013	11.3	144	5.3	0.1	
Pb	208	He	0.007	34.6	549	11.5	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	591923	1.87	604198	97.97	30	120	
Ge	72	He	88039	0.66	81288	108.30	30	120	
Ge	72	H2	1022877	0.90	933781	109.54	30	120	
In	115	He	787480	1.11	717634	109.73	30	120	
Lu	175	He	2254495	0.15	2064230	109.22	30	120	

Sample Report

Sample Table

Sample Name	K1604717-005
Data File Name	024SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T10:19:37-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	3.297	1.67	8553	0.04	
Ni	60	He	29.167	3.69	42384	0.07	
Ni	62	He	29.942	1.83	6903	0.43	
Cu	63	He	32.272	0.90	136511	0.02	
Cu	65	He	32.759	0.67	69631	0.05	
Zn	66	He	160.162	0.63	85964	0.19	
As	75	He	16.536	1.33	5582	0.30	
Se	77	H2	2.311	4.40	1153	0.20	
Se	78	H2	0.504	6.36	306	0.16	
Sb	121	He	0.516	6.20	1229	0.04	
Sb	123	He	0.529	3.25	997	0.05	
[Pb]	206	He	45.243	0.80	279113	0.02	
[Pb]	207	He	43.710	0.66	240214	0.02	
Pb	208	He	44.571	1.26	1127081	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	597410	1.93	604198	98.88	30	120	
Ge	72	He	91751	1.12	81288	112.87	30	120	
Ge	72	H2	1044896	1.24	933781	111.90	30	120	
In	115	He	806020	0.55	717634	112.32	30	120	
Lu	175	He	2326159	1.71	2064230	112.69	30	120	

Sample Report

Sample Table

Sample Name	K1604717-006
Data File Name	025SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T10:23:26-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	3.491	1.40	9023	0.04	
Ni	60	He	29.932	2.64	43244	0.07	
Ni	62	He	29.967	2.47	6869	0.44	
Cu	63	He	60.443	1.77	254087	0.02	
Cu	65	He	61.193	1.07	129270	0.05	
Zn	66	He	209.998	1.94	112035	0.19	
As	75	He	20.959	1.18	7032	0.30	
Se	77	H2	3.067	7.21	1286	0.24	
Se	78	H2	0.766	8.76	460	0.17	
Sb	121	He	0.889	4.08	1999	0.04	
Sb	123	He	0.849	3.04	1528	0.06	
[Pb]	206	He	90.120	1.54	544881	0.02	
[Pb]	207	He	87.408	1.88	470767	0.02	
Pb	208	He	88.748	1.48	2199510	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	595159	1.75	604198	98.50	30	120	
Ge	72	He	91226	1.67	81288	112.23	30	120	
Ge	72	H2	1040636	0.45	933781	111.44	30	120	
In	115	He	785352	0.88	717634	109.44	30	120	
Lu	175	He	2280174	0.95	2064230	110.46	30	120	

Sample Report

Sample Table

Sample Name	K1604717-007
Data File Name	026SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T10:27:16-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	3.255	4.25	8288	0.04	
Ni	60	He	29.826	2.97	41807	0.07	
Ni	62	He	30.044	2.05	6681	0.45	
Cu	63	He	47.850	1.40	195214	0.02	
Cu	65	He	47.632	2.42	97631	0.05	
Zn	66	He	168.988	2.45	87483	0.19	
As	75	He	18.250	1.78	5942	0.31	
Se	77	H2	3.036	4.31	1235	0.25	
Se	78	H2	0.732	6.95	424	0.17	
Sb	121	He	0.577	2.96	1320	0.04	
Sb	123	He	0.621	2.58	1126	0.06	
[Pb]	206	He	69.394	0.48	415303	0.02	
[Pb]	207	He	67.496	0.72	359818	0.02	
Pb	208	He	68.393	0.52	1677762	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	586499	2.56	604198	97.07	30	120	
Ge	72	He	88526	2.26	81288	108.90	30	120	
Ge	72	H2	1003425	1.96	933781	107.46	30	120	
In	115	He	780633	0.23	717634	108.78	30	120	
Lu	175	He	2256659	0.65	2064230	109.32	30	120	

Sample Report

Sample Table

Sample Name	K1604717-008
Data File Name	027SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T10:31:05-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	2.930	2.56	7546	0.04	
Ni	60	He	11.395	6.88	16642	0.07	
Ni	62	He	10.990	6.36	2555	0.43	
Cu	63	He	13.395	6.71	56734	0.02	
Cu	65	He	13.408	6.56	28524	0.05	
Zn	66	He	265.622	6.97	142500	0.19	
As	75	He	12.163	6.51	4107	0.30	
Se	77	H2	2.823	4.13	1218	0.23	
Se	78	H2	0.440	7.50	263	0.17	
Sb	121	He	0.492	3.97	1147	0.04	
Sb	123	He	0.503	5.10	926	0.05	
[Pb]	206	He	37.102	1.38	227251	0.02	
[Pb]	207	He	36.149	1.29	197268	0.02	
Pb	208	He	36.752	1.14	922868	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	592875	2.06	604198	98.13	30	120	
Ge	72	He	91799	3.94	81288	112.93	30	120	
Ge	72	H2	1020422	0.82	933781	109.28	30	120	
In	115	He	785137	4.79	717634	109.41	30	120	
Lu	175	He	2309640	6.08	2064230	111.89	30	120	

Sample Report

Sample Table

Sample Name	K1604717-009
Data File Name	028SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T10:34:53-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	3.246	2.69	8172	0.04	
Ni	60	He	12.159	2.10	17205	0.07	
Ni	62	He	12.360	5.55	2780	0.44	
Cu	63	He	15.072	1.64	61872	0.02	
Cu	65	He	15.173	1.58	31297	0.05	
Zn	66	He	221.743	2.33	115361	0.19	
As	75	He	14.013	1.64	4587	0.31	
Se	77	H2	4.251	18.58	1177	0.36	
Se	78	H2	0.550	9.70	261	0.21	
Sb	121	He	0.328	2.13	785	0.04	
Sb	123	He	0.335	1.94	627	0.05	
[Pb]	206	He	34.619	1.77	207921	0.02	
[Pb]	207	He	33.035	1.40	176740	0.02	
Pb	208	He	33.933	1.48	835380	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	579750	1.59	604198	95.95	30	120	
Ge	72	He	88958	1.31	81288	109.44	30	120	
Ge	72	H2	820030	10.23	933781	87.82	30	120	
In	115	He	777523	0.46	717634	108.35	30	120	
Lu	175	He	2264490	1.61	2064230	109.70	30	120	

Sample Report

Sample Table

Sample Name	K1604717-010
Data File Name	029SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T10:38:42-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	3.061	1.22	7700	0.04	
Ni	60	He	28.190	2.13	40437	0.07	
Ni	62	He	27.495	0.52	6258	0.44	
Cu	63	He	68.134	1.79	284267	0.02	
Cu	65	He	68.589	1.99	143789	0.05	
Zn	66	He	194.794	2.26	103149	0.19	
As	75	He	26.130	2.05	8699	0.30	
Se	77	H2	3.428	6.32	1334	0.26	
Se	78	H2	0.667	10.39	396	0.17	
Sb	121	He	0.938	4.35	2091	0.04	
Sb	123	He	0.877	3.36	1566	0.06	
[Pb]	206	He	103.608	0.29	628781	0.02	
[Pb]	207	He	99.793	1.02	539453	0.02	
Pb	208	He	101.545	0.74	2525994	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	579079	1.69	604198	95.84	30	120	
Ge	72	He	90537	0.99	81288	111.38	30	120	
Ge	72	H2	1026266	1.51	933781	109.90	30	120	
In	115	He	779965	0.84	717634	108.69	30	120	
Lu	175	He	2288630	1.61	2064230	110.87	30	120	

Sample Report

Sample Table

Sample Name	K1604717-011
Data File Name	030SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T10:42:31-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	3.955	1.02	10333	0.04	
Ni	60	He	36.597	0.86	54025	0.07	
Ni	62	He	36.006	2.55	8429	0.43	
Cu	63	He	53.851	0.17	231435	0.02	
Cu	65	He	54.683	0.18	118088	0.05	
Zn	66	He	224.813	1.49	122604	0.18	
As	75	He	35.967	1.55	12330	0.29	
Se	77	H2	2.619	1.54	1221	0.21	
Se	78	H2	0.588	5.13	360	0.16	
Sb	121	He	0.946	1.87	2183	0.04	
Sb	123	He	0.933	0.40	1723	0.05	
[Pb]	206	He	90.476	1.56	557716	0.02	
[Pb]	207	He	85.306	1.85	468411	0.02	
Pb	208	He	88.046	1.45	2224753	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	601585	1.66	604198	99.57	30	120	
Ge	72	He	93243	0.73	81288	114.71	30	120	
Ge	72	H2	1054766	1.19	933781	112.96	30	120	
In	115	He	808021	0.27	717634	112.60	30	120	
Lu	175	He	2324830	1.46	2064230	112.62	30	120	

Sample Report

Sample Table

Sample Name	K1604717-012
Data File Name	031SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T10:46:20-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	1.730	4.09	4306	0.04	
Ni	60	He	16.847	16.08	20869	0.08	
Ni	62	He	16.806	11.78	3320	0.51	
Cu	63	He	27.135	16.89	97549	0.03	
Cu	65	He	27.159	16.17	49094	0.06	
Zn	66	He	77.103	15.99	35216	0.22	
As	75	He	13.625	14.34	3918	0.35	
Se	77	H2	3.846	7.21	1359	0.28	
Se	78	H2	0.437	3.71	253	0.17	
Sb	121	He	0.341	8.85	721	0.05	
Sb	123	He	0.388	23.52	628	0.06	
[Pb]	206	He	34.445	13.91	185923	0.02	
[Pb]	207	He	33.360	14.54	160315	0.02	
Pb	208	He	33.804	14.47	747578	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	572036	1.82	604198	94.68	30	120	
Ge	72	He	79169	13.60	81288	97.39	30	120	
Ge	72	H2	990513	1.83	933781	106.08	30	120	
In	115	He	695276	14.83	717634	96.88	30	120	
Lu	175	He	2059003	12.68	2064230	99.75	30	120	

Sample Report

Sample Table

Sample Name	K1604717-013
Data File Name	032SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T10:50:10-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	1.984	2.57	4983	0.04	
Ni	60	He	20.047	1.69	28008	0.07	
Ni	62	He	20.860	1.71	4626	0.45	
Cu	63	He	34.765	1.69	141156	0.02	
Cu	65	He	35.016	1.52	71439	0.05	
Zn	66	He	89.063	1.18	45908	0.19	
As	75	He	20.103	2.17	6512	0.31	
Se	77	H2	3.716	12.41	1356	0.27	
Se	78	H2	0.441	7.81	259	0.17	
Sb	121	He	1.033	5.12	2253	0.05	
Sb	123	He	1.003	3.40	1752	0.06	
[Pb]	206	He	91.162	0.48	555556	0.02	
[Pb]	207	He	86.574	0.81	469969	0.02	
Pb	208	He	88.268	0.75	2204919	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	577565	2.44	604198	95.59	30	120	
Ge	72	He	88077	1.23	81288	108.35	30	120	
Ge	72	H2	1003837	1.19	933781	107.50	30	120	
In	115	He	766041	0.45	717634	106.75	30	120	
Lu	175	He	2298107	1.20	2064230	111.33	30	120	

Sample Report

Sample Table

Sample Name	K1604717-014
Data File Name	033SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T10:54:00-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	2.214	2.51	5709	0.04	
Ni	60	He	19.909	1.18	28246	0.07	
Ni	62	He	19.884	0.73	4480	0.44	
Cu	63	He	30.946	0.50	127617	0.02	
Cu	65	He	31.012	1.41	64260	0.05	
Zn	66	He	115.579	0.98	6048S	0.19	
As	75	He	14.979	1.41	4929	0.30	
Se	77	H2	2.764	4.82	1201	0.23	
Se	78	H2	0.341	11.29	204	0.17	
Sb	121	He	0.554	7.33	1277	0.04	
Sb	123	He	0.543	5.08	995	0.05	
[Pb]	206	He	53.441	1.49	329297	0.02	
[Pb]	207	He	51.531	0.78	282863	0.02	
Pb	208	He	52.483	1.29	1325660	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	593200	1.62	604198	98.18	30	120	
Ge	72	He	89438	0.68	81288	110.03	30	120	
Ge	72	H2	1015417	1.39	933781	108.74	30	120	
In	115	He	784512	0.55	717634	109.32	30	120	
Lu	175	He	2323507	0.76	2064230	112.56	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	034_CCV.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T10:57:50-07:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	24.868	2.596	62667	0.64	25	99	
Ni	60	He	25.452	2.314	35768	0.53	25	102	
Ni	62	He	25.362	4.229	5654	1.85	25	101	
Cu	63	He	25.280	2.475	103370	0.48	25	101	
Cu	65	He	25.534	2.586	52464	0.62	25	102	
Zn	66	He	25.908	5.238	13471	3.00	25	104	
As	75	He	25.897	2.646	8445	1.88	25	104	
Se	77	H2	25.345	2.606	5341	3.13	25	101	
Se	78	H2	25.111	1.553	14759	0.50	25	100	
Sb	121	He	25.576	3.110	55849	0.44	25	102	
Sb	123	He	25.542	2.272	45098	0.82	25	102	
[Pb]	206	He	24.630	4.166	149733	0.47	25	99	
[Pb]	207	He	24.888	4.912	134744	1.10	25	100	
Pb	208	He	24.846	4.369	619086	0.58	25	99	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	581387	2.56	604198	96.22	30	120	
Ge	72	He	88702	2.43	81288	109.12	30	120	
Ge	72	H2	1036712	1.17	933781	111.02	30	120	
In	115	He	795966	3.04	717634	110.92	30	120	
Lu	175	He	2294106	4.36	2064230	111.14	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	035_CCB.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T11:01:39-07:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	0.003	27.9	25	8.4	0.04	
Ni	60	He	0.015	104.9	144	14.8	0.2	
Ni	62	He	0.039	166.7	40	36.3	0.2	
Cu	63	He	0.007	142.5	137	29.6	0.2	
Cu	65	He	0.008	118.9	71	25.8	0.2	
Zn	66	He	0.054	31.9	72	11.6	1	
As	75	He	-0.002	-838.6	6	72.6	0.25	
Se	77	H2	-0.201	-100.6	677	5.0	20	
Se	78	H2	0.004	165.3	10	36.6	0.5	
Sb	121	He	0.004	102.4	97	9.6	0.2	
Sb	123	He	0.016	26.7	81	9.3	0.05	
[Pb]	206	He	0.007	100.2	141	31.2	0.1	
[Pb]	207	He	0.008	119.7	121	40.6	0.1	
Pb	208	He	0.008	44.6	572	15.0	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	599656	1.32	604198	99.25	30	120	
Ge	72	He	88259	1.17	81288	108.58	30	120	
Ge	72	H2	1022494	0.52	933781	109.50	30	120	
In	115	He	799974	0.33	717634	111.47	30	120	
Lu	175	He	2308434	0.69	2064230	111.83	30	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLCCVS
Data File Name	036LCCV.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T11:05:30-07:00
Sample Type	LLCCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	0.042	14.666	125	13.67	0.04	105	
Ni	60	He	0.403	17.132	682	13.49	0.4	101	
Ni	62	He	0.499	2S.637	141	20.64	0.4	125	
Cu	63	He	0.201	5.291	922	4.11	0.2	100	
Cu	65	He	0.229	7.947	521	6.57	0.2	114	
Zn	66	He	1.079	11.21S	600	10.93	1	108	
As	75	He	0.990	2.241	327	2.84	1	99	
Se	77	H2	1.935	7.205	1059	0.41	2	97	
Se	78	H2	1.955	2.290	1139	0.77	2	98	
Sb	121	He	0.106	16.772	315	12.60	0.1	106	
Sb	123	He	0.120	5.730	261	4.26	0.1	120	
[Pb]	206	He	0.099	0.852	690	0.48	0.1	99	
[Pb]	207	He	0.100	16.950	616	15.17	0.1	100	
Pb	208	He	0.102	3.674	2876	2.48	0.1	102	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	594707	2.34	604198	98.43	30	120	
Ge	72	He	87994	0.64	81288	108.25	30	120	
Ge	72	H2	1021267	2.05	933781	109.37	30	120	
In	115	He	786852	0.59	717634	109.65	30	120	
Lu	175	He	2270542	1.04	2064230	109.99	30	120	

Sample Report

Sample Table

Sample Name	K1604717-015
Data File Name	037SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T11:09:21-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	1.925	2.60	4849	0.04	
Ni	60	He	27.401	2.72	38169	0.07	
Ni	62	He	27.981	3.94	6184	0.45	
Cu	63	He	61.437	2.09	248925	0.02	
Cu	65	He	62.224	1.92	126685	0.05	
Zn	66	He	201.490	1.95	103617	0.19	
As	75	He	27.772	1.10	8979	0.31	
Se	77	H2	1.294	7.11	933	0.14	
Se	78	H2	0.377	6.28	224	0.17	
Sb	121	He	3.118	1.88	6687	0.05	
Sb	123	He	3.115	3.42	5385	0.06	
[Pb]	206	He	152.255	1.47	922413	0.02	
[Pb]	207	He	147.991	2.41	798588	0.02	
Pb	208	He	151.624	2.26	3765101	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	579209	1.12	604198	95.86	30	120	
Ge	72	He	87932	1.73	81288	108.17	30	120	
Ge	72	H2	1009176	1.71	933781	108.07	30	120	
In	115	He	772725	0.81	717634	107.68	30	120	
Lu	175	He	2285146	1.90	2064230	110.70	30	120	

Sample Report

Sample Table

Sample Name	K1604717-016
Data File Name	038SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T11:13:14-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	2.1S4	2.66	5387	0.04	
Ni	60	He	67.104	2.78	91587	0.07	
Ni	62	He	69.230	3.11	14973	0.46	
Cu	63	He	44.650	2.15	177641	0.03	
Cu	65	He	44.817	3.20	89581	0.05	
Zn	66	He	237.831	2.25	120063	0.20	
As	75	He	16.824	2.81	5342	0.31	
Se	77	H2	1.641	8.37	960	0.17	
Se	78	H2	0.310	8.09	179	0.17	
Sb	121	He	1.814	1.57	3857	0.05	
Sb	123	He	1.866	1.24	3188	0.06	
[Pb]	206	He	42.499	0.99	251381	0.02	
[Pb]	207	He	40.546	1.11	213633	0.02	
Pb	208	He	41.734	0.71	1011890	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	575140	0.55	604198	95.19	30	120	
Ge	72	He	86341	2.60	81288	106.22	30	120	
Ge	72	H2	973837	1.47	933781	104.29	30	120	
In	115	He	758965	1.09	717634	105.76	30	120	
Lu	175	He	2230116	0.82	2064230	108.04	30	120	

Sample Report

Sample Table

Sample Name	K1604717-017
Data File Name	039SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T11:17:04-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	1.792	1.95	4686	0.04	
Ni	60	He	51.997	1.22	73729	0.07	
Ni	62	He	51.949	2.79	11676	0.44	
Cu	63	He	37.782	1.07	156104	0.02	
Cu	65	He	37.579	0.86	78020	0.05	
Zn	66	He	214.663	1.43	112533	0.19	
As	75	He	15.402	2.32	5079	0.30	
Se	77	H2	1.325	16.76	951	0.14	
Se	78	H2	0.252	1.79	154	0.16	
Sb	121	He	0.331	4.62	809	0.04	
Sb	123	He	0.366	5.56	698	0.05	
[Pb]	206	He	50.731	2.04	313456	0.02	
[Pb]	207	He	49.734	2.73	273715	0.02	
Pb	208	He	50.468	2.47	1278144	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	600982	0.87	604198	99.47	30	120	
Ge	72	He	89625	0.45	81288	110.26	30	120	
Ge	72	H2	1022980	1.13	933781	109.55	30	120	
In	115	He	796572	0.55	717634	111.00	30	120	
Lu	175	He	2330342	2.18	2064230	112.89	30	120	

Sample Report

Sample Table

Sample Name	K1604717-018
Data File Name	040SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T11:20:54-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	2.410	3.11	6218	0.04	
Ni	60	He	59.734	0.61	85135	0.07	
Ni	62	He	60.162	2.25	13589	0.44	
Cu	63	He	44.557	1.08	185057	0.02	
Cu	65	He	44.513	1.52	92897	0.05	
Zn	66	He	247.553	1.52	130457	0.19	
As	75	He	18.734	0.23	6209	0.30	
Se	77	H2	1.875	11.17	1056	0.18	
Se	78	H2	0.351	10.55	213	0.16	
Sb	121	He	0.435	4.36	1044	0.04	
Sb	123	He	0.455	6.65	859	0.05	
[Pb]	206	He	67.561	2.02	420307	0.02	
[Pb]	207	He	65.905	1.40	365256	0.02	
Pb	208	He	66.872	1.38	1705412	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	593796	1.31	604198	98.28	30	120	
Ge	72	He	90107	1.22	81288	110.85	30	120	
Ge	72	H2	1028218	1.72	933781	110.11	30	120	
In	115	He	802032	0.85	717634	111.76	30	120	
Lu	175	He	2346160	1.24	2064230	113.66	30	120	

Sample Report

Sample Table

Sample Name	K1604717-019
Data File Name	041SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T11:24:44-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	1.761	1.98	4573	0.04	
Ni	60	He	67.422	3.41	95946	0.07	
Ni	62	He	67.903	1.60	15318	0.44	
Cu	63	He	48.154	2.06	199767	0.02	
Cu	65	He	49.047	2.70	102230	0.05	
Zn	66	He	265.214	2.19	139611	0.19	
As	75	He	19.326	3.47	6397	0.30	
Se	77	H2	1.591	26.48	1002	0.16	
Se	78	H2	0.325	10.72	197	0.17	
Sb	121	He	0.621	3.28	1438	0.04	
Sb	123	He	0.616	6.22	1133	0.05	
[Pb]	206	He	67.183	0.25	415095	0.02	
[Pb]	207	He	67.744	0.75	372842	0.02	
Pb	208	He	67.641	0.63	1713089	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	596961	1.78	604198	98.80	30	120	
Ge	72	He	90030	2.39	81288	110.76	30	120	
Ge	72	H2	1024980	0.94	933781	109.77	30	120	
In	115	He	793181	0.69	717634	110.53	30	120	
Lu	175	He	2329767	0.56	2064230	112.86	30	120	

Sample Report

Sample Table

Sample Name	K1604717-020
Data File Name	042SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T11:28:34-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	2.098	1.29	5249	0.04	
Ni	60	He	23.899	1.29	32859	0.07	
Ni	62	He	23.920	1.40	5220	0.46	
Cu	63	He	47.620	1.86	190359	0.03	
Cu	65	He	48.217	2.14	96850	0.05	
Zn	66	He	95.511	1.70	48479	0.20	
As	75	He	20.542	1.03	6553	0.31	
Se	77	H2	3.602	3.76	1307	0.28	
Se	78	H2	0.461	5.75	264	0.17	
Sb	121	He	1.022	2.36	2268	0.05	
Sb	123	He	1.057	3.24	1875	0.06	
[Pb]	206	He	102.413	1.27	625731	0.02	
[Pb]	207	He	98.035	1.37	533571	0.02	
Pb	208	He	99.548	1.32	2493164	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	575278	1.23	604198	95.21	30	120	
Ge	72	He	86730	0.76	81288	106.70	30	120	
Ge	72	H2	982755	1.53	933781	105.24	30	120	
In	115	He	778879	0.10	717634	108.53	30	120	
Lu	175	He	2304033	0.53	2064230	111.62	30	120	

Prep Blank (PB) Report

Sample Table

Sample Name	KQ16051S1-01
Data File Name	043_PB.d
Data Path Name	D:\Data\Experiments\0S2616A1.b
Acq Date Time	2016-05-26T11:32:23-07:00
Sample Type	PB
Dilution	1
Comment	5
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	-0.001	-314.1	16	35.2	0.04	
Ni	60	He	0.043	25.5	191	8.1	0.2	
Ni	62	He	0.002	2358.0	33	40.0	0.2	
Cu	63	He	0.052	12.8	333	7.9	0.2	
Cu	65	He	0.038	18.9	139	11.8	0.2	
Zn	66	He	0.250	21.4	181	14.9	1	
As	75	He	-0.006	-100.4	5	44.6	0.25	
Se	77	H2	0.089	219.7	747	7.4	2	
Se	78	H2	-0.007	-85.6	4	81.0	0.5	
Sb	121	He	-0.020	-13.8	44	15.2	0.1	
Sb	123	He	-0.012	-60.0	31	43.0	0.05	
[Pb]	206	He	0.028	9.3	274	5.1	0.1	
[Pb]	207	He	0.033	11.1	268	7.6	0.1	
Pb	208	He	0.027	6.8	1094	3.7	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	622420	1.49	604198	103.02	30	120	
Ge	72	He	92227	0.99	81288	113.46	30	120	
Ge	72	H2	1047095	2.53	933781	112.13	30	120	
In	115	He	821604	0.93	717634	114.49	30	120	
Lu	175	He	2375372	1.02	2064230	115.07	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	KQ1605151-02
Data File Name	044_LCS.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T11:36:13-07:00
Sample Type	LCS
Dilution	1
Comment	20
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	4.957	2.481	13879	1.36	5	99.1	
Ni	60	He	49.462	0.450	72950	1.07	50	98.9	
Ni	62	He	50.012	2.454	11693	2.82	50	100.0	
Cu	63	He	24.919	0.646	107118	0.33	25	99.7	
Cu	65	He	25.032	1.016	54069	0.42	25	100.1	
Zn	66	He	50.279	0.814	27449	0.49	50	100.6	
As	75	He	50.593	0.475	17335	0.34	50	101.2	
Se	77	H2	51.765	2.753	10165	0.83	50	103.5	
Se	78	H2	50.780	3.157	29873	0.97	50	101.6	
Sb	121	He	49.577	0.677	115326	1.05	50	99.2	
Sb	123	He	49.846	1.228	93756	0.72	50	99.7	
[Pb]	206	He	46.862	0.885	299687	0.78	50	93.7	
[Pb]	207	He	48.757	1.102	277742	0.55	50	97.5	
Pb	208	He	47.717	0.661	1250842	0.43	50	95.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	645109	1.45	604198	106.77	30	120	
Ge	72	He	93211	0.62	81288	114.67	30	120	
Ge	72	H2	1038295	2.25	933781	111.19	30	120	
In	115	He	848051	0.65	717634	118.17	30	120	
Lu	175	He	2411196	0.74	2064230	116.81	30	120	

All Reference Sample Report

Sample Table

Sample Name	K1604717-021
Data File Name	045_ARF.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T11:40:01-07:00
Sample Type	AllRef
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	2.471	1.79	6448	0.04	
Ni	60	He	32.141	2.47	44455	0.07	
Ni	62	He	31.497	3.24	6910	0.46	
Cu	63	He	31.187	1.96	125582	0.02	
Cu	65	He	31.329	1.53	63391	0.05	
Zn	66	He	176.581	1.55	90213	0.20	
As	75	He	13.499	4.08	4338	0.31	
Se	77	H2	2.394	11.04	1098	0.22	
Se	78	H2	0.372	6.87	215	0.17	
Sb	121	He	0.354	6.73	813	0.04	
Sb	123	He	0.347	5.83	629	0.06	
[Pb]	206	He	38.450	1.83	226935	0.02	
[Pb]	207	He	37.209	1.80	195635	0.02	
Pb	208	He	37.900	1.74	916941	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	600513	1.76	604198	99.39	30	120	
Ge	72	He	87339	0.70	81288	107.44	30	120	
Ge	72	H2	981977	1.11	933781	105.16	30	120	
In	115	He	754042	1.14	717634	105.07	30	120	
Lu	175	He	2225464	1.32	2064230	107.81	30	120	

Sample Report

Sample Table

Sample Name	K1604717-021L
Data File Name	046SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T11:43:51-07:00
Sample Type	Sample
Dilution	1
Comment	25
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	0.502	2.44	1318	0.04	
Ni	60	He	6.574	1.83	9598	0.07	
Ni	62	He	6.448	2.75	1503	0.43	
Cu	63	He	6.564	1.35	27696	0.02	
Cu	65	He	6.741	3.86	14292	0.05	
Zn	66	He	35.117	2.17	18777	0.19	
As	75	He	2.644	4.53	893	0.30	
Se	77	H2	0.552	57.51	834	0.07	
Se	78	H2	0.067	15.64	48	0.14	
Sb	121	He	0.052	12.10	200	0.03	
Sb	123	He	0.075	13.96	182	0.04	
[Pb]	206	He	7.647	0.43	47564	0.02	
[Pb]	207	He	7.328	2.48	40585	0.02	
Pb	208	He	7.495	2.32	191034	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	598290	1.27	604198	99.02	30	120	
Ge	72	He	91222	0.22	81288	112.22	30	120	
Ge	72	H2	1051078	1.03	933781	112.56	30	120	
In	115	He	791270	0.48	717634	110.26	30	120	
Lu	175	He	2341182	2.32	2064230	113.42	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	047_CCV.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T11:47:42-07:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	25.099	1.942	64829	1.31	25	100	
Ni	60	He	24.735	1.688	35191	1.72	25	99	
Ni	62	He	24.134	3.269	5450	3.34	25	97	
Cu	63	He	24.475	1.125	101310	0.35	25	98	
Cu	65	He	24.803	1.121	51590	0.40	25	99	
Zn	66	He	24.786	1.555	13053	0.70	25	99	
As	75	He	24.974	2.140	8243	1.48	25	100	
Se	77	H2	25.318	4.074	5326	3.25	25	101	
Se	78	H2	24.718	1.978	14503	1.73	25	99	
Sb	121	He	25.203	0.951	54780	0.33	25	101	
Sb	123	He	25.304	0.389	44464	0.74	25	101	
[Pb]	206	He	24.311	1.113	148220	0.62	25	97	
[Pb]	207	He	24.168	1.693	131246	0.75	25	97	
Pb	208	He	24.240	1.804	605741	0.64	25	97	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	595702	0.63	604198	98.59	30	120	
Ge	72	He	89761	0.86	81288	110.42	30	120	
Ge	72	H2	1034925	1.37	933781	110.83	30	120	
In	115	He	791814	0.62	717634	110.34	30	120	
Lu	175	He	2298171	1.39	2064230	111.33	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	048_CCB.d
Data Path Name	D:\Data\Experiments\0S2616A1.b
Acq Date Time	2016-05-26T11:52:01-07:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	0.003	65.4	25	24.1	0.04	
Ni	60	He	0.015	94.2	144	10.9	0.2	
Ni	62	He	-0.037	-140.7	23	49.5	0.2	
Cu	63	He	0.009	31.4	146	10.3	0.2	
Cu	65	He	0.009	73.7	76	20.8	0.2	
Zn	66	He	0.018	230.2	54	39.4	1	
As	75	He	0.001	1275.0	7	71.4	0.25	
Se	77	H2	-0.122	-42.8	693	2.3	20	
Se	78	H2	-0.004	-141.5	6	50.0	0.5	
Sb	121	He	0.000	-1018.5	86	9.9	0.2	
Sb	123	He	0.008	38.2	64	8.3	0.05	
[Pb]	206	He	0.003	67.4	116	9.3	0.1	
[Pb]	207	He	0.008	58.4	126	22.6	0.1	
Pb	208	He	0.005	16.6	513	5.5	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	594840	2.16	604198	98.45	30	120	
Ge	72	He	89200	2.65	81288	109.73	30	120	
Ge	72	H2	1025430	1.04	933781	109.81	30	120	
In	115	He	791589	0.45	717634	110.31	30	120	
Lu	175	He	2319253	2.08	2064230	112.35	30	120	

Sample Report

Sample Table

Sample Name	LRSTD
Data File Name	049SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T11:57:14-07:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	498.800	1.17	1295232	0.04	
Ni	60	He	495.637	1.34	691761	0.07	
Ni	62	He	500.248	0.86	110577	0.45	
Cu	63	He	512.828	1.53	2087409	0.02	
Cu	65	He	497.710	1.91	1017964	0.05	
Zn	66	He	491.140	1.48	253762	0.19	
As	75	He	490.006	1.04	159095	0.31	
Se	77	H2	492.232	2.80	87589	0.56	
Se	78	H2	479.976	2.36	273245	0.18	
Sb	121	He	484.993	0.23	1050736	0.05	
Sb	123	He	479.926	0.71	840932	0.06	
[Pb]	206	He	509.095	0.79	3104736	0.02	
[Pb]	207	He	495.843	0.67	2693634	0.02	
Pb	208	He	490.701	0.80	12266557	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	598948	1.09	604198	99.13	30	120	
Ge	72	He	88359	1.03	81288	108.70	30	120	
Ge	72	H2	1005024	2.94	933781	107.63	30	120	
In	115	He	790407	0.09	717634	110.14	30	120	
Lu	175	He	2300021	0.60	2064230	111.42	30	120	

Post Digestion Spike Sample (PDS) Report

Sample Table

Sample Name	K1604717-021A
Data File Name	050_PDS.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T12:00:58-07:00
Sample Type	PDS
Dilution	1
Comment	5
QC Ref File Name	045_ARF.d
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Spk Amt	%Rec	QC Flag
Be	9	No Gas	54.857	1.218	138772	0.73	50	105	
Ni	60	He	78.598	0.918	111563	0.58	50	93	
Ni	62	He	79.002	0.404	17770	1.36	50	95	
Cu	63	He	77.378	0.958	320101	0.38	50	92	
Cu	65	He	78.016	1.094	162173	1.05	50	93	
Zn	66	He	219.465	1.805	115228	0.95	50	86	
As	75	He	61.920	1.537	20431	0.50	50	97	
Se	77	H2	51.483	0.639	9870	0.82	50	98	
Se	78	H2	49.276	1.745	28290	0.85	50	98	
Sb	121	He	50.721	0.711	108187	0.25	50	101	
Sb	123	He	50.653	1.506	87365	1.48	50	101	
[Pb]	206	He	83.922	1.338	509816	0.37	50	91	
[Pb]	207	He	82.964	1.022	448968	0.27	50	92	
Pb	208	He	83.673	1.061	2083623	0.27	50	92	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	583487	0.61	604198	96.57	30	120	
Ge	72	He	89772	1.11	81288	110.44	30	120	
Ge	72	H2	1012968	1.40	933781	108.48	30	120	
In	115	He	777643	0.53	717634	108.36	30	120	
Lu	175	He	2291017	1.29	2064230	110.99	30	120	

Matrix Spike Sample (MS) Report

Sample Table

Sample Name	K1604717-021S
Data File Name	051_Spk.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T12:04:47-07:00
Sample Type	Spike
Dilution	1
Comment	5
QC Ref File Name	045_ARF.d
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Spk Amt	%Rec	QC Flag
Be	9	No Gas	23.392	1.373	58644	1.71	20	105	
Ni	60	He	222.392	0.096	318157	0.53	200	95	
Ni	62	He	221.663	0.838	50226	0.28	200	95	
Cu	63	He	125.116	0.333	521982	0.42	100	94	
Cu	65	He	126.192	1.127	264533	0.68	100	95	
Zn	66	He	387.492	0.358	205181	0.53	200	105	
As	75	He	205.093	0.993	68240	0.39	200	96	
Se	77	H2	190.984	0.554	35263	0.63	200	94	
Se	78	H2	185.351	1.281	108115	0.25	200	92	
Sb	121	He	89.373	0.720	191794	0.58	200	45	Flag
Sb	123	He	88.866	0.499	154223	0.32	200	44	Flag
[Pb]	206	He	218.849	1.994	1354096	0.22	200	90	
[Pb]	207	He	224.780	1.331	1239021	0.58	200	94	
Pb	208	He	223.491	1.267	5668881	0.83	200	93	

PDS OK

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	578127	0.88	604198	95.69	30	120	
Ge	72	He	90541	0.63	81288	111.38	30	120	
Ge	72	H2	1029341	1.17	933781	110.23	30	120	
In	115	He	782645	0.22	717634	109.06	30	120	
Lu	175	He	2334027	1.91	2064230	113.07	30	120	

Matrix Spike Sample (MS) Report

Sample Table

Sample Name	K1604717-1SD
Data File Name	052_Spk.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T12:08:35-07:00
Sample Type	Spike
Dilution	1
Comment	5
QC Ref File Name	045_ARF.d
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Spk Amt	%Rec	QC Flag
Be	9	No Gas	23.551	1.452	59269	0.13	20	105	
Ni	60	He	223.787	0.361	320422	0.97	200	96	
Ni	62	He	226.697	1.527	51407	0.97	200	98	
Cu	63	He	125.044	0.583	522108	0.16	100	94	
Cu	65	He	126.145	0.936	264656	0.66	100	95	
Zn	66	He	374.059	0.914	198228	0.42	200	99	
As	75	He	209.607	0.590	69801	0.18	200	98	
Se	77	H2	199.520	2.225	36349	0.82	200	99	
Se	78	H2	193.402	2.497	111406	0.66	200	97	
Sb	121	He	96.210	1.119	203347	1.33	200	48	Flag
Sb	123	He	95.551	0.953	163315	0.70	200	48	Flag
[Pb]	206	He	226.835	0.776	1379062	0.46	200	94	
[Pb]	207	He	234.449	0.777	1269711	0.55	200	99	
Pb	208	He	232.231	0.532	5787545	0.77	200	97	

PDS etc

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	580458	1.59	604198	96.07	30	120	
Ge	72	He	90617	0.67	81288	111.48	30	120	
Ge	72	H2	1016835	2.53	933781	108.89	30	120	
In	115	He	770830	0.34	717634	107.41	30	120	
Lu	175	He	2292945	1.20	2064230	111.08	30	120	

Sample Report

Sample Table

Sample Name	K1604717-022
Data File Name	053SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T12:12:24-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	2.754	1.63	7131	0.04	
Ni	60	He	21.412	0.81	29769	0.07	
Ni	62	He	20.776	0.52	4586	0.45	
Cu	63	He	56.766	1.29	229354	0.02	
Cu	65	He	57.031	1.29	115784	0.05	
Zn	66	He	156.574	1.68	80297	0.19	
As	75	He	14.484	1.34	4672	0.31	
Se	77	H2	2.453	15.30	1123	0.22	
Se	78	H2	0.616	3.57	355	0.17	
Sb	121	He	0.674	2.01	1492	0.05	
Sb	123	He	0.696	4.33	1226	0.06	
[Pb]	206	He	84.322	0.38	505193	0.02	
[Pb]	207	He	81.902	0.47	437088	0.02	
Pb	208	He	83.109	0.54	2040997	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	596013	0.48	604198	98.65	30	120	
Ge	72	He	87662	0.22	81288	107.84	30	120	
Ge	72	H2	995509	1.11	933781	106.61	30	120	
In	115	He	762385	0.70	717634	106.24	30	120	
Lu	175	He	2259181	1.05	2064230	109.44	30	120	

Sample Report

Sample Table

Sample Name	K1604717-023
Data File Name	054SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T12:16:13-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	2.097	4.01	5364	0.04	
Ni	60	He	17.738	0.73	25309	0.07	
Ni	62	He	17.163	1.78	3890	0.44	
Cu	63	He	22.993	1.93	95306	0.02	
Cu	65	He	22.789	2.36	47463	0.05	
Zn	66	He	90.473	1.98	47586	0.19	
As	75	He	9.488	2.56	3140	0.30	
Se	77	H2	1.961	7.98	1054	0.19	
Se	78	H2	0.315	20.62	188	0.17	
Sb	121	He	0.311	4.83	753	0.04	
Sb	123	He	0.361	5.45	676	0.05	
[Pb]	206	He	30.078	1.27	188607	0.02	
[Pb]	207	He	28.807	1.48	160908	0.02	
Pb	208	He	29.560	2.04	759733	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	588675	2.51	604198	97.43	30	120	
Ge	72	He	89884	1.32	81288	110.58	30	120	
Ge	72	H2	1012227	2.38	933781	108.40	30	120	
In	115	He	782203	0.90	717634	109.00	30	120	
Lu	175	He	2364164	1.85	2064230	114.53	30	120	

Sample Report

Sample Table

Sample Name	K1604717-024
Data File Name	055SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T12:20:03-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	2.544	1.14	6545	0.04	
Ni	60	He	11.860	0.97	16987	0.07	
Ni	62	He	11.414	2.04	2601	0.44	
Cu	63	He	14.233	2.01	59123	0.02	
Cu	65	He	14.108	1.85	29454	0.05	
Zn	66	He	102.609	0.99	54047	0.19	
As	75	He	9.913	2.71	3285	0.30	
Se	77	H2	2.335	14.29	1129	0.21	
Se	78	H2	0.264	7.62	161	0.16	
Sb	121	He	0.238	14.62	600	0.04	
Sb	123	He	0.240	13.68	469	0.05	
[Pb]	206	He	21.805	2.08	134895	0.02	
[Pb]	207	He	20.602	1.95	113538	0.02	
Pb	208	He	21.273	2.11	539443	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	591847	1.03	604198	97.96	30	120	
Ge	72	He	90015	1.03	81288	110.74	30	120	
Ge	72	H2	1020163	2.75	933781	109.25	30	120	
In	115	He	785748	0.62	717634	109.49	30	120	
Lu	175	He	2332164	1.94	2064230	112.98	30	120	

Sample Report

Sample Table

Sample Name	K1604717-025
Data File Name	056SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T12:23:54-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	2.744	0.86	6990	0.04	
Ni	60	He	23.176	2.30	33002	0.07	
Ni	62	He	23.666	2.27	5349	0.44	
Cu	63	He	24.796	0.49	102712	0.02	
Cu	65	He	25.116	0.88	52276	0.05	
Zn	66	He	125.387	1.74	65893	0.19	
As	75	He	11.341	1.96	3750	0.30	
Se	77	H2	2.469	6.12	1152	0.21	
Se	78	H2	0.306	12.70	185	0.17	
Sb	121	He	0.338	1.90	812	0.04	
Sb	123	He	0.349	6.69	656	0.05	
[Pb]	206	He	32.007	1.78	199739	0.02	
[Pb]	207	He	31.015	2.57	172389	0.02	
Pb	208	He	31.578	1.93	807733	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	586087	2.15	604198	97.00	30	120	
Ge	72	He	89819	0.37	81288	110.50	30	120	
Ge	72	H2	1018688	1.73	933781	109.09	30	120	
In	115	He	783135	0.65	717634	109.13	30	120	
Lu	175	He	2353090	2.30	2064230	113.99	30	120	

Sample Report

Sample Table

Sample Name	K1604717-026
Data File Name	057SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T12:27:43-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	6.657	1.07	16328	0.04	
Ni	60	He	58.803	2.08	83240	0.07	
Ni	62	He	58.469	2.16	13118	0.45	
Cu	63	He	104.047	1.18	429097	0.02	
Cu	65	He	104.413	1.50	216380	0.05	
Zn	66	He	450.671	1.68	235877	0.19	
As	75	He	36.951	1.91	12158	0.30	
Se	77	H2	10.145	50.47	1674	0.61	
Se	78	H2	2.115	40.82	806	0.26	
Sb	121	He	1.000	3.13	2175	0.05	
Sb	123	He	1.054	1.27	1832	0.06	
[Pb]	206	He	135.843	1.04	821707	0.02	
[Pb]	207	He	132.380	0.52	713332	0.02	
Pb	208	He	136.295	0.12	3379668	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	565260	1.03	604198	93.56	30	120	
Ge	72	He	89507	1.47	81288	110.11	30	120	
Ge	72	H2	739552	36.03	933781	79.20	30	120	
In	115	He	762827	0.97	717634	106.30	30	120	
Lu	175	He	2281258	1.05	2064230	110.51	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	058_CCV.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T12:31:31-07:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	25.298	1.602	65971	0.46	25	101	
Ni	60	He	24.289	1.050	35464	0.87	25	97	
Ni	62	He	25.449	4.227	5893	2.69	25	102	
Cu	63	He	24.183	1.438	102727	0.76	25	97	
Cu	65	He	24.244	2.283	51744	0.87	25	97	
Zn	66	He	24.228	2.611	13093	1.32	25	97	
As	75	He	24.964	0.541	8457	1.60	25	100	
Se	77	H2	25.495	0.718	5436	1.17	25	102	
Se	78	H2	24.494	2.372	14579	0.73	25	98	
Sb	121	He	25.311	1.233	55160	1.45	25	101	
Sb	123	He	25.118	0.383	44254	0.63	25	100	
[Pb]	206	He	23.715	1.189	147091	0.38	25	95	
[Pb]	207	He	23.736	1.674	131133	0.62	25	95	
Pb	208	He	23.827	1.732	605722	0.66	25	95	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	601460	1.14	604198	99.55	30	120	
Ge	72	He	92119	1.68	81288	113.32	30	120	
Ge	72	H2	1050027	1.65	933781	112.45	30	120	
In	115	He	793862	0.38	717634	110.62	30	120	
Lu	175	He	2337986	1.57	2064230	113.26	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	059_CCB.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T12:35:20-07:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	0.012	18.9	49	12.9	0.04	
Ni	60	He	0.010	134.8	139	13.9	0.2	
Ni	62	He	-0.013	-285.9	29	29.0	0.2	
Cu	63	He	0.014	38.2	167	12.5	0.2	
Cu	65	He	0.008	136.9	73	31.8	0.2	
Zn	66	He	0.072	45.3	83	21.2	1	
As	75	He	-0.003	-212.4	6	36.7	0.25	
Se	77	H2	-0.059	-42.4	721	1.5	20	
Se	78	H2	0.006	113.5	12	34.6	0.5	
Sb	121	He	0.008	75.1	106	12.2	0.2	
Sb	123	He	0.023	73.6	93	33.1	0.05	
[Pb]	206	He	0.015	31.5	191	16.8	0.1	
[Pb]	207	He	0.014	32.2	159	15.9	0.1	
Pb	208	He	0.012	20.5	693	12.0	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	603327	1.03	604198	99.86	30	120	
Ge	72	He	89820	0.72	81288	110.50	30	120	
Ge	72	H2	1049271	1.89	933781	112.37	30	120	
In	115	He	808072	1.05	717634	112.60	30	120	
Lu	175	He	2337111	2.83	2064230	113.22	30	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLCCVS
Data File Name	060LCCV.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T12:39:10-07:00
Sample Type	LLCCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	0.045	13.255	134	11.27	0.04	113	
Ni	60	He	0.358	11.651	636	8.53	0.4	90	
Ni	62	He	0.474	13.669	139	9.70	0.4	119	
Cu	63	He	0.198	5.145	936	5.36	0.2	99	
Cu	65	He	0.212	8.804	500	8.35	0.2	106	
Zn	66	He	1.189	13.029	672	11.38	1	119	
As	75	He	1.065	6.578	360	6.46	1	107	
Se	77	H2	2.151	7.372	1117	3.21	2	108	
Se	78	H2	2.009	1.016	1191	2.38	2	100	
Sb	121	He	0.104	20.328	315	14.84	0.1	104	
Sb	123	He	0.109	11.929	245	9.35	0.1	109	
[Pb]	206	He	0.113	12.009	783	10.17	0.1	113	
[Pb]	207	He	0.101	12.843	630	11.70	0.1	101	
Pb	208	He	0.108	2.257	3058	2.51	0.1	108	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	597913	1.97	604198	98.96	30	120	
Ge	72	He	90186	0.85	81288	110.95	30	120	
Ge	72	H2	1039246	1.39	933781	111.29	30	120	
In	115	He	800160	0.20	717634	111.50	30	120	
Lu	175	He	2297329	0.56	2064230	111.29	30	120	

LABORATORY DATA CONSULTANTS, INC.
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ARCADIS U.S., Inc.
401 E. Main Street, Suite 400
El Paso, TX 79901
[redacted]

July 20, 2016

SUBJECT: Fort Bliss, Castner Range, Data Validation

[redacted]

Enclosed are the final validation reports for the fraction listed below. These SDGs were received on July 1, 2016. Attachment 1 is a summary of the samples that were reviewed for each analysis.

LDC Project #36618:

SDG #	Fraction:
K1604717 & K1605069	Metals

The data validation was performed under Level III & IV guidelines. The analyses were validated using the following documents, as applicable to each method:

- Final Quality Assurance Project Plan, Military Munitions Response Program Remedial Investigation, Closed Castner Firing Range, Fort Bliss, El Paso, Texas, February 2015
- U.S. Department of Defense Quality Systems Manual for Environmental Laboratories, 5.0, July 2013
- USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review, October 2004
- EPA SW 846, Third Edition, Test Methods for Evaluating Solid Waste, update 1, July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III, December 1996; update IIIA, April 1998; IIIB, November 2004; update IV, February 2007; update V, July 2014

Please feel free to contact us if you have any questions.

Sincerely,

[redacted]

EDD 90/10 ADR/IV

LDC #36618 (Arcadis-Millersville, MD / Fort Bliss, Castner Range)

LDC	SDG#	DATE REC'D	(2) DATE DUE	(7) Metals (6020A)																															
Matrix:	Water/Sediment			W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S
A	K1604717	07/01/16	07/18/16	0	26																														
B	K1605069	07/01/16	07/18/16	0	12																														
B	K1605069	07/01/16	07/18/16	0	7																														
Total	T/PG			0	45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45

Shaded cells indicate Level IV validation (all other cells are Level III validation). These sample counts do not include MS/MSD, and DUPs

L:\Arcadis\Fort Bliss\36618ST.wpd

Data Validation Report
Fort Bliss, Castner Range

SDGs: K1604717, K1605069

Prepared for

Arcadis U.S., Inc.
401 E. Main Street, Suite 400
El Paso, TX 79901

Prepared by

Laboratory Data Consultants, Inc.
2701 Loker Ave West, Suite 220
Carlsbad, CA 92010

July 20, 2016

INTRODUCTION

This Data Validation Report (DVR) presents Level III and Level IV data validation results for samples collected during the May 2016 sampling period. Data validation was performed in accordance with the Final Quality Assurance Project Plan (QAPP), Military Munitions Response Program Remedial Investigation, Closed Castner Firing Range, Fort Bliss, El Paso, Texas (February 2015), the U.S. Department of Defense (DoD) Quality Systems Manual (QSM) for Environmental Laboratories, Version 5.0 (July 2013), and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines (CLPNFG) for Inorganic Superfund Data Review (October 2004). Where specific guidance is not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Metals by Environmental Protection Agency (EPA) SW 846 Method 6020A

The sample identification and methods of analyses performed on each sample is presented in Attachment 1. Overall data qualification summary is presented in Attachment 2. Level III Automated Data Review outliers are presented in Enclosure I. DVRs for samples on which Level 4 validation was performed are presented in Enclosure II.

All sample results were subjected to Level III data validation, which comprises an evaluation of quality control (QC) summary results for sample holding times, initial and continuing calibrations, laboratory blanks, initial and continuing calibration blanks (ICB/CCBs), surrogates, interference check (ICSA and ICSAB) samples, matrix spike/matrix spike duplicates (MS/MSD), serial dilution, laboratory control sample (LCS), field duplicates, and split samples. Approximately 15 percent of samples were subjected to Level 4 evaluation as indicated in Attachment 1, which comprised a review of the QC summary forms as well as the raw data, to confirm sample quantitation and identification.

Automated data review was performed on all QC summary results using the Automated Data Review (ADR) software program (LDC, 2013) with exception of the calibrations, interference check samples, ICB/CCBs and serial dilution, which were validated manually. Quality assurance (QA)/QC criteria specified in the QAPP, DoD QSM and CLPNFGs were incorporated with the program's reference library to assess compliance with project requirements.

The following are definitions of the data qualifiers:

J (Estimated): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated due to non-conformances discovered during data validation.

U (Non-detected): The compound or analyte was analyzed for and positively identified by the laboratory; however the analyte should be considered non-detect at the reported concentration due to the presence of contaminants detected in the associated blank(s).

UJ (Non-detected estimated): The compound or analyte was reported as not detected by the laboratory; however the reported quantitation/detection limit is estimated due to non-conformances discovered during data validation.

R (Rejected): The sample results were rejected due to gross non-conformances discovered during data validation. Data qualified as rejected is not usable.

NA (Not applicable): Data did not warrant qualification since detected results only are affected and the compound was not detected in the associated samples.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

I. Sample Receipt & Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

II. Initial Calibration and Initial Calibration Verification

All criteria for the initial calibration and initial calibration verifications of the method were met.

III. Continuing Calibration

All criteria for the continuing calibration verifications of the method were met.

IV. Laboratory Blanks

Laboratory blanks were performed as required by the method. No contaminant concentrations were detected in the laboratory blanks reviewed by ADR.

No contaminant concentrations were detected in the initial or continuing calibration blanks with the following exceptions:

SDG/ Method	Laboratory Blank ID	Analyte	Maximum Concentration	Associated Samples
K1604717/ 6020A	ICB/CCB	Antimony	0.020 ug/L	FTBL-SED-51-0-6-050316 FTBL-SED-51-12-18-050316 FTBL-SED-36-0-6-050316 FTBL-SED-37-0-6-050316 FTBL-SED-38-0-6-050316 FTBL-SED-39-0-6-050316 FTBL-SED-39-12-18-050316 FTBL-SED-40-0-6-050316 FTBL-SED-40-12-18-050316 FTBL-SED-46-0-6-050416 FTBL-SED-47-0-6-050416 FTBL-SED-48-0-6-050416 FTBL-SED-49-0-6-050416 FTBL-SED-50-0-6-050416 FTBL-SED-45-0-6-050416 FTBL-SED-44-0-6-050416 FTBL-SED-43-0-6-050416 FTBL-SED-42-0-6-050416 FTBL-SED-41-0-6-050416 FD050416 FTBL-SED-31-0-6-050516
K1604717/ 6020A	ICB/CCB	Antimony Beryllium	0.023 ug/L 0.012 ug/L	FTBL-SED-32-0-6-050516 FTBL-SED-33-0-6-050516 FTBL-SED-34-0-6-050516 FD050516 FTBL-SED-35-0-6-050516

SDG/ Method	Laboratory Blank ID	Analyte	Maximum Concentration	Associated Samples
K1605069/ 6020A	ICB/CCB	Antimony	0.020 ug/L	FTBL-SED-52-0-6-051116 FTBL-SED-01-0-6-051216 FTBL-SED-02-0-6-051216 FD051216 FTBL-SED-03-0-6-051216 FTBL-SED-04-0-6-051216 FTBL-SED-05-0-6-051216
K1605069/ 6020A	ICB/CCB	Antimony	0.021 ug/L	FTBL-SED-25-0-6-051016 FTBL-SED-11-0-6-051016 FTBL-SED-12-0-6-051016 FD051016 FTBL-SED-13-0-6-051016 FTBL-SED-20-0-6-051116 FTBL-SED-20-12-18-051116 FTBL-SED-19-0-6-051116 FTBL-SED-19-12-18-051116 FTBL-SED-18-0-6-051116 FTBL-SED-17-0-6-051116 FTBL-SED-16-0-6-051116

Sample concentrations were compared to concentrations detected in the initial or continuing calibration blanks. The sample concentrations were not detected or were significantly greater than the concentrations found in the associated blanks.

V. Field Blanks

No field blanks were identified in these SDGs.

VI. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were performed on an associated project sample. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the exception of antimony and copper in three MS/MSD pairs. No data were qualified since the post-digestion spike %R was within QC limits. The details are provided in Enclosure I.

VIII. Duplicate Sample Analysis

The laboratory has indicated that there were no duplicate (DUP) analyses specified for the samples in this SDG, and therefore laboratory duplicate analyses were not performed for this SDG.

IX. Serial Dilution

Serial dilution analysis was performed on an associated project sample. The percent differences (%D) were within QC limits.

X. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

XI. Field Duplicates/Split Samples

Four field duplicate pairs were collected and analyzed for metals. All RPDs were within QC limits. The field duplicate result comparisons are provided in Enclosure I.

Samples FTBL-SED-49-0-6-050416 and FTBL-SED-49-0-6-050416-QA (from SDG FA33720), FTBL-SED-34-0-6-050516 and FTBL-SED-34-0-6-050516-QA (from SDG FA33720), FTBL-SED-12-0-6-051016 and FTBL-SED-12-0-6-051016-QA (from SDG FA33973), and FTBL-SED-02-0-6-051216 and FTBL-SED-02-0-6-051216-QA (from SDG FA33973) were identified as split samples. No metals were detected in any of the split samples with the following exceptions:

Analyte	Concentration (mg/Kg)		RPD (≤50)	Qualifiers
	FTBL-SED-49-0-6-050416	FTBL-SED-49-0-6-050416-QA (SDG: FA33720)		
Antimony	0.470	0.77U	48	
Arsenic	9.42	6.0	44	
Beryllium	0.930	0.77	19	
Copper	16.4	13.5	19	
Lead	41.4	50.7	20	
Nickel	9.39	8.6	9	
Zinc	41.7	36.7	13	

Analyte	Concentration (mg/Kg)		RPD (≤50)	Qualifiers
	FTBL-SED-34-0-6-050516	FTBL-SED-34-0-6-050516-QA (SDG: FA33720)		
Antimony	0.135	1.1U	156	J (all detects) UJ (all non-detects)
Arsenic	5.57	5.2	7	
Beryllium	1.43	1.0	35	
Copper	7.92	9.5	18	
Lead	11.9	15.5	26	

Analyte	Concentration (mg/Kg)		RPD (≤50)	Qualifiers
	FTBL-SED-34-0-6-050516	FTBL-SED-34-0-6-050516-QA (SDG: FA33720)		
Nickel	6.66	8.7	27	
Zinc	57.6	52.9	9	

Analyte	Concentration (mg/Kg)		RPD (≤50)	Qualifiers
	FTBL-SED-12-0-6-051016	FTBL-SED-12-0-6-051016-QA (SDG: FA33973)		
Antimony	0.263	2.1U	155	J (all detects) UJ (all non-detects)
Arsenic	9.13	17.2	61	J (all detects)
Beryllium	2.08	1.5	32	
Copper	32.2	29.3	9	
Lead	36.0	34.8	3	
Nickel	15.3	13.9	10	
Zinc	318	309	3	

Analyte	Concentration (mg/Kg)		RPD (≤50)	Qualifiers
	FTBL-SED-02-0-6-051216	FTBL-SED-02-0-6-051216-QA (SDG: FA33973)		
Antimony	0.228	9.5U	191	J (all detects) UJ (all non-detects)
Arsenic	6.21	8.0	25	
Beryllium	3.12	3.2	3	
Copper	13.9	13.1	6	
Lead	20.3	20.8	2	
Nickel	6.74	7.1	5	
Zinc	45.1	60.3	29	

XII. Compound Quantitation

The laboratory reporting limits were evaluated. All laboratory reporting limits met the specified requirements.

XIII. Overall Assessment of Data

The analysis was conducted within all specifications of the methods. No results were rejected in these SDGs.

Due to split sample RPD, data were qualified as estimated in three samples.

The quality control criteria reviewed, as discussed above, were met and are considered acceptable. Sample results that were found to be estimated (J) are usable for limited purposes only. Based upon the data validation, all other results are considered valid and usable for all purposes.

Data flags are summarized and are presented as Attachment 2.

Attachment 1

Sample Cross Reference

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
03-May-2016	FTBL-SED-51-0-6-050316	K1604717-001	N	EPA 3050B	6020A	III
03-May-2016	FTBL-SED-51-0-6-050316MS	K1604717-001MS	MS	EPA 3050B	6020A	III
03-May-2016	FTBL-SED-51-0-6-050316MSD	K1604717-001SD	MSD	EPA 3050B	6020A	III
03-May-2016	FTBL-SED-51-12-18-050316	K1604717-002	N	EPA 3050B	6020A	III
03-May-2016	FTBL-SED-36-0-6-050316	K1604717-003	N	EPA 3050B	6020A	III
03-May-2016	FTBL-SED-37-0-6-050316	K1604717-004	N	EPA 3050B	6020A	III
03-May-2016	FTBL-SED-38-0-6-050316	K1604717-005	N	EPA 3050B	6020A	III
03-May-2016	FTBL-SED-39-0-6-050316	K1604717-006	N	EPA 3050B	6020A	III
03-May-2016	FTBL-SED-39-12-18-050316	K1604717-007	N	EPA 3050B	6020A	III
03-May-2016	FTBL-SED-40-0-6-050316	K1604717-008	N	EPA 3050B	6020A	III
03-May-2016	FTBL-SED-40-12-18-050316	K1604717-009	N	EPA 3050B	6020A	III
04-May-2016	FD050416	K1604717-020	FD	EPA 3050B	6020A	III
04-May-2016	FTBL-SED-46-0-6-050416	K1604717-010	N	EPA 3050B	6020A	III
04-May-2016	FTBL-SED-47-0-6-050416	K1604717-011	N	EPA 3050B	6020A	III
04-May-2016	FTBL-SED-48-0-6-050416	K1604717-012	N	EPA 3050B	6020A	III
04-May-2016	FTBL-SED-49-0-6-050416	K1604717-013	N	EPA 3050B	6020A	III
04-May-2016	FTBL-SED-50-0-6-050416	K1604717-014	N	EPA 3050B	6020A	III
04-May-2016	FTBL-SED-45-0-6-050416	K1604717-015	N	EPA 3050B	6020A	III
04-May-2016	FTBL-SED-44-0-6-050416	K1604717-016	N	EPA 3050B	6020A	III
04-May-2016	FTBL-SED-43-0-6-050416	K1604717-017	N	EPA 3050B	6020A	III
04-May-2016	FTBL-SED-42-0-6-050416	K1604717-018	N	EPA 3050B	6020A	III
04-May-2016	FTBL-SED-41-0-6-050416	K1604717-019	N	EPA 3050B	6020A	III
05-May-2016	FD050516	K1604717-025	FD	EPA 3050B	6020A	III
05-May-2016	FTBL-SED-31-0-6-050516	K1604717-021	N	EPA 3050B	6020A	III
05-May-2016	FTBL-SED-31-0-6-050516MS	K1604717-021MS	MS	EPA 3050B	6020A	III
05-May-2016	FTBL-SED-31-0-6-050516MSD	K1604717-021SD	MSD	EPA 3050B	6020A	III

III = Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike* *DUP = Lab Duplicate*
IV = Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
05-May-2016	FTBL-SED-32-0-6-050516	K1604717-022	N	EPA 3050B	6020A	III
05-May-2016	FTBL-SED-33-0-6-050516	K1604717-023	N	EPA 3050B	6020A	III
05-May-2016	FTBL-SED-34-0-6-050516	K1604717-024	N	EPA 3050B	6020A	III
05-May-2016	FTBL-SED-35-0-6-050516	K1604717-026	N	EPA 3050B	6020A	III
10-May-2016	FD051016	K1605069-004	FD	EPA 3050B	6020A	III
10-May-2016	FTBL-SED-25-0-6-051016	K1605069-001	N	EPA 3050B	6020A	III
10-May-2016	FTBL-SED-25-0-6-051016MS	K1605069-001MS	MS	EPA 3050B	6020A	III
10-May-2016	FTBL-SED-25-0-6-051016MSD	K1605069-001SD	MSD	EPA 3050B	6020A	III
10-May-2016	FTBL-SED-11-0-6-051016	K1605069-002	N	EPA 3050B	6020A	III
10-May-2016	FTBL-SED-12-0-6-051016	K1605069-003	N	EPA 3050B	6020A	III
10-May-2016	FTBL-SED-13-0-6-051016	K1605069-005	N	EPA 3050B	6020A	IV
11-May-2016	FTBL-SED-20-0-6-051116	K1605069-006	N	EPA 3050B	6020A	IV
11-May-2016	FTBL-SED-20-12-18-051116	K1605069-007	N	EPA 3050B	6020A	IV
11-May-2016	FTBL-SED-19-0-6-051116	K1605069-008	N	EPA 3050B	6020A	IV
11-May-2016	FTBL-SED-19-12-18-051116	K1605069-009	N	EPA 3050B	6020A	IV
11-May-2016	FTBL-SED-18-0-6-051116	K1605069-010	N	EPA 3050B	6020A	IV
11-May-2016	FTBL-SED-16-0-6-051116	K1605069-012	N	EPA 3050B	6020A	III
11-May-2016	FTBL-SED-17-0-6-051116	K1605069-011	N	EPA 3050B	6020A	IV
11-May-2016	FTBL-SED-52-0-6-051116	K1605069-013	N	EPA 3050B	6020A	III
11-May-2016	FTBL-SED-52-0-6-051116RE	K1605069-013RE	N	EPA 3050B	6020A	III
12-May-2016	FD051216	K1605069-016	FD	EPA 3050B	6020A	III
12-May-2016	FD051216RE	K1605069-016RE	FD	EPA 3050B	6020A	III
12-May-2016	FTBL-SED-01-0-6-051216	K1605069-014	N	EPA 3050B	6020A	III
12-May-2016	FTBL-SED-01-0-6-051216RE	K1605069-014RE	N	EPA 3050B	6020A	III
12-May-2016	FTBL-SED-02-0-6-051216	K1605069-015	N	EPA 3050B	6020A	III
12-May-2016	FTBL-SED-02-0-6-051216RE	K1605069-015RE	N	EPA 3050B	6020A	III

III = Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike* *DUP = Lab Duplicate*
IV = Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
12-May-2016	FTBL-SED-03-0-6-051216	K1605069-017	N	EPA 3050B	6020A	III
12-May-2016	FTBL-SED-03-0-6-051216RE	K1605069-017RE	N	EPA 3050B	6020A	III
12-May-2016	FTBL-SED-04-0-6-051216	K1605069-018	N	EPA 3050B	6020A	III
12-May-2016	FTBL-SED-04-0-6-051216RE	K1605069-018RE	N	EPA 3050B	6020A	III
12-May-2016	FTBL-SED-05-0-6-051216	K1605069-019	N	EPA 3050B	6020A	III
12-May-2016	FTBL-SED-05-0-6-051216RE	K1605069-019RE	N	EPA 3050B	6020A	III

III = Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike* *DUP = Lab Duplicate*
IV = Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment 2
Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: K1604717, K1605069 **Laboratory: ALS_K**

EDD Filename: K1604717_SEDD2A, K1605069_SEDD2A **eQAPP Name: Arcadis_FtBliss_ALS_160627**

SDG: K1604717

Method Category: **METALS**

Method: **6020A** ***Matrix:*** **Soil**

Sample ID: **FTBL-SED-34-0-6-050516** ***Collected:*** **5/5/2016 11:00:00 AM** ***Analysis Type:*** **Initial** ***Dilution:*** **5.0**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
ANTIMONY	0.135	J	0.028	LOD	0.056	LOQ	mg/Kg	J	Fd

SDG: K1605069

Method Category: **METALS**

Method: **6020A** ***Matrix:*** **Soil**

Sample ID: **FTBL-SED-02-0-6-051216** ***Collected:*** **5/12/2016 10:05:00 AM** ***Analysis Type:*** **Initial** ***Dilution:*** **5.0**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
ANTIMONY	0.228	J	0.020	LOD	0.041	LOQ	mg/Kg	J	Fd

Sample ID: **FTBL-SED-12-0-6-051016** ***Collected:*** **5/10/2016 3:10:00 PM** ***Analysis Type:*** **Initial** ***Dilution:*** **5.0**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
ANTIMONY	0.263	J	0.020	LOD	0.040	LOQ	mg/Kg	J	Fd
ARSENIC	9.13	=	0.08	LOD	0.40	LOQ	mg/Kg	J	Fd

* denotes a non-reportable result

Project Name and Number: 06261038.0000 - Castner Range Fort Bliss, TX

Data Qualifier Summary

Lab Reporting Batch ID: K1604717, K1605069 **Laboratory: ALS_K**

EDD Filename: K1604717_SEDD2A, K1605069_SEDD2A **eQAPP Name: Arcadis_FtBliss_ALS_160627**

Reason Code Legend

Reason Code	*Description*
Fd	Field Duplicate Precision
Ms	Matrix Spike Lower Estimation

* denotes a non-reportable result

Project Name and Number: 06261038.0000 - Castner Range Fort Bliss, TX

Enclosure I

Level III ADR Outliers

(Including Manual Review Outliers)

Quality Control
Outlier Reports

K1604717

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: K1604717 **Laboratory: ALS_K**

EDD Filename: K1604717_SEDD2A **eQAPP Name: Arcadis_FtBliss_ALS_160627**

Method: **6020A**
Matrix: **Soil**

QC Sample ID (Associated Samples)	*Compound*	*MS %R*	*MSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
FTBL-SED-51-0-6-050316MS (Dry) FTBL-SED-51-0-6-050316MSD (Dry) (FTBL-SED-51-0-6-050316)	ANTIMONY COPPER	43 82	46 -	72.00-124.00 84.00-119.00	- -	ANTIMONY COPPER	No Qual, PS in: Sb = 98%, Cu=99%
FTBL-SED-31-0-6-050516MS (Dry) FTBL-SED-31-0-6-050516MSD (Dry) (FTBL-SED-31-0-6-050516)	ANTIMONY	44	48	72.00-124.00	-	ANTIMONY	No Qual, PS in: Sb = 101%

Field Duplicate RPD Report

Lab Reporting Batch ID: K1604717 **Laboratory: ALS_K**

EDD Filename: K1604717_SEDD2A **eQAPP Name: Arcadis_FtBliss_ALS_160627**

Method: 6020A
Matrix: Soil

Analyte	*Concentration (mg/Kg)*		*Sample RPD*	*eQAPP RPD*	*Flag*
	FTBL-SED-34-0-6-050516	FD050516 (Dry)			
ANTIMONY	0.135	0.156	14	50.00	
ARSENIC	5.57	5.07	9	50.00	
BERYLLIUM	1.43	1.23	15	50.00	
COPPER	7.92	11.2	34	50.00	No Qualifiers Applied
LEAD	11.9	14.1	17	50.00	
NICKEL	6.66	10.4	44	50.00	
ZINC	57.6	56.0	3	50.00	

Analyte	*Concentration (mg/Kg)*		*Sample RPD*	*eQAPP RPD*	*Flag*
	FTBL-SED-49-0-6-050416	FD050416 (Dry)			
ANTIMONY	0.470	0.463	2	50.00	
ARSENIC	9.42	9.00	5	50.00	
BERYLLIUM	0.930	0.919	1	50.00	
COPPER	16.4	21.1	25	50.00	No Qualifiers Applied
LEAD	41.4	43.6	5	50.00	
NICKEL	9.39	10.5	11	50.00	
ZINC	41.7	41.8	0	50.00	

Project Name and Number: 06261038.0000 - Castner Range Fort Bliss, TX

LDC #: 36618A4a
SDG #: K1604717
Laboratory: ALS Environmental

VALIDATION COMPLETENESS WORKSHEET
ADR

Date: 7/13/16
Page: 1 of 2
[redacted]

METHOD: Metals (EPA SW 846 Method 6020A)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A/N	
II.	ICP/MS Tune	A	
III.	Instrument Calibration	A	
IV.	ICP Interference Check Sample (ICS) Analysis	A	
V.	Laboratory Blanks	SW	ICB/CCB only
VI.	Field Blanks	N	
VII.	Matrix Spike/Matrix Spike Duplicates	N	
VIII.	Duplicate sample analysis	N	
IX.	Serial Dilution	A	
X.	Laboratory control samples	N	(from FA33720)
XI.	Field Duplicates	SW	split=(13, FTBL-SED-49-0-6-050416-QA) =(24, FTBL-SED-310-6-050516-QA)
XII.	Internal Standard (ICP-MS)	A	
XIII.	Sample Result Verification	N	
XIV	Overall Assessment of Data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID	Lab ID	Matrix	Date
1	FTBL-SED-51-0-6-050316	K1604717-001	Sediment	05/03/16
2	FTBL-SED-51-12-18-050316	K1604717-002	Sediment	05/03/16
3	FTBL-SED-36-0-6-050316	K1604717-003	Sediment	05/03/16
4	FTBL-SED-37-0-6-050316	K1604717-004	Sediment	05/03/16
5	FTBL-SED-38-0-6-050316	K1604717-005	Sediment	05/03/16
6	FTBL-SED-39-0-6-050316	K1604717-006	Sediment	05/03/16
7	FTBL-SED-39-12-18-050316	K1604717-007	Sediment	05/03/16
8	FTBL-SED-40-0-6-050316	K1604717-008	Sediment	05/03/16
9	FTBL-SED-40-12-18-050316	K1604717-009	Sediment	05/03/16
10	FTBL-SED-46-0-6-050416	K1604717-010	Sediment	05/04/16
11	FTBL-SED-47-0-6-050416	K1604717-011	Sediment	05/04/16
12	FTBL-SED-48-0-6-050416	K1604717-012	Sediment	05/04/16
13	FTBL-SED-49-0-6-050416	K1604717-013	Sediment	05/04/16
14	FTBL-SED-50-0-6-050416	K1604717-014	Sediment	05/04/16
15	FTBL-SED-45-0-6-050416	K1604717-015	Sediment	05/04/16

LDC #: 36618A4a
SDG #: K1604717
Laboratory: ALS Environmental

VALIDATION COMPLETENESS WORKSHEET
ADR

Date: 7/13/16

[redacted]

METHOD: Metals (EPA SW 846 Method 6020A)

	Client ID	Lab ID	Matrix	Date
16	FTBL-SED-44-0-6-050416	K1604717-016	Sediment	05/04/16
17	FTBL-SED-43-0-6-050416	K1604717-017	Sediment	05/04/16
18	FTBL-SED-42-0-6-050416	K1604717-018	Sediment	05/04/16
19	FTBL-SED-41-0-6-050416	K1604717-019	Sediment	05/04/16
20	FD050416	K1604717-020	Sediment	05/04/16
21	FTBL-SED-31-0-6-050516	K1604717-021	Sediment	05/05/16
22	FTBL-SED-32-0-6-050516	K1604717-022	Sediment	05/05/16
23	FTBL-SED-33-0-6-050516	K1604717-023	Sediment	05/05/16
24	FTBL-SED-34-0-6-050516	K1604717-024	Sediment	05/05/16
25	FD050516	K1604717-025	Sediment	05/05/16
26	FTBL-SED-35-0-6-050516	K1604717-026	Sediment	05/05/16
27	FTBL-SED-51-0-6-050316MS	K1604717-001MS	Sediment	05/03/16
28	FTBL-SED-51-0-6-050316MSD	K1604717-001MSD	Sediment	05/03/16
29	FTBL-SED-31-0-6-050516MS	K1604717-021MS	Sediment	05/05/16
30	FTBL-SED-31-0-6-050516MSD	K1604717-021MSD	Sediment	05/05/16
31				
32				
33				
34				
35				

Notes:

LDC #: 36618A4a

VALIDATION FINDINGS WORKSHEET
Sample Specific Element Reference

[redacted]

All circled elements are applicable to each sample.

Sample ID	Matrix	Target Analyte List (TAL)
1-26		Al, (Sb), As, Ba, (Be), Cd, Ca, Cr, Co, (Cu), Fe, (Pb), Mg, Mn, Hg, (Ni), K, Se, Ag, Na, Tl, V, (Zn), Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
Analysis Method		
ICP		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
ICP-MS		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
GFAA		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___

Comments: Mercury by CVAA if performed

LDC #: 36618A4a

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000) Soil preparation factor applied: 100x x 5xdil
Sample Concentration units, unless otherwise noted: ug/L Associated Samples: 1-21

				Sample Identification										
Analyte	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Level	No qualifiers (>5x)										
Sb		0.020	0.05											

Sample Concentration units, unless otherwise noted: ug/L Associated Samples: 22-26

				Sample Identification										
Analyte	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Level	No qualifiers (>5x)										
Sb		0.023	0.0575											
Be		0.012	0.03											

Samples with analyte concentrations within five times the associated ICB, CCB or PB concentration are listed above with the identifications from the Validation Completeness Worksheet. These sample results were qualified as not detected, "U".
Note : a - The listed analyte concentration is the highest ICB, CCB, or PB detected in the analysis of each element.

LDC#: 36618A4a

VALIDATION FINDINGS WORKSHEET
Split Duplicates

METHOD: Metals (EPA Method 6010B/7000)

Analyte	Concentration (mg/Kg)		RPD (≤50)	Qualifiers (Parents Only)
	13	FTBL-SED-49-0-6-050416-QA		
Antimony	0.470	0.77U	48	
Arsenic	9.42	6.0	44	
Beryllium	0.930	0.77	19	
Copper	16.4	13.5	19	
Lead	41.4	50.7	20	
Nickel	9.39	8.6	9	
Zinc	41.7	36.7	13	

Analyte	Concentration (mg/Kg)		RPD (≤50)	Qualifiers (Parents Only)
	24	FTBL-SED-34-0-6-050516-QA		
Antimony	0.135	1.1U	156	~~NQ (<LOQ)~~ J/UJ/A
Arsenic	5.57	5.2	7	
Beryllium	1.43	1.0	35	
Copper	7.92	9.5	18	
Lead	11.9	15.5	26	
Nickel	6.66	8.7	27	
Zinc	57.6	52.9	9	

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Quality Control
Outlier Reports

K1605069

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: K1605069 **Laboratory: ALS_K**

EDD Filename: K1605069_SEDD2A **eQAPP Name: Arcadis_FtBliss_ALS_160627**

Method: **6020A**
Matrix: **Soil**

QC Sample ID (Associated Samples)	*Compound*	*MS %R*	*MSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
FTBL-SED-25-0-6-051016MS (Dry) FTBL-SED-25-0-6-051016MSD (Dry) (FTBL-SED-25-0-6-051016)	ANTIMONY	69	63	72.00-124.00	-	ANTIMONY	No Qual, PS in: Sb = 97%

Project Name and Number: 06261038.0000 - Castner Range Fort Bliss, TX

Field Duplicate RPD Report

Lab Reporting Batch ID: K1605069 **Laboratory: ALS_K**

EDD Filename: K1605069_SEDD2A **eQAPP Name: Arcadis_FtBliss_ALS_160627**

Method: 6020A
Matrix: Soil

Analyte	*Concentration (mg/Kg)* FTBL-SED-12-0-6-051016	FD051016 (Dry)	*Sample RPD*	*eQAPP RPD*	*Flag*
ANTIMONY	0.263	0.214	21	50.00	No Qualifiers Applied
ARSENIC	9.13	8.43	8	50.00	
BERYLLIUM	2.08	1.98	5	50.00	
COPPER	32.2	28.9	11	50.00	
LEAD	36.0	29.5	20	50.00	
NICKEL	15.3	16.8	9	50.00	
ZINC	318	352	10	50.00	

Analyte	*Concentration (mg/Kg)* FTBL-SED-02-0-6-051216	FD051216 (Dry)	*Sample RPD*	*eQAPP RPD*	*Flag*
ANTIMONY	0.228	0.204	11	50.00	No Qualifiers Applied
ARSENIC	6.21	6.18	0	50.00	
BERYLLIUM	3.12	3.04	3	50.00	
COPPER	13.9	13.9	0	50.00	
NICKEL	6.74	6.58	2	50.00	
ZINC	45.1	45.8	2	50.00	

Analyte	*Concentration (mg/Kg)* FTBL-SED-02-0-6-051216RE	FD051216RE (Dry)	*Sample RPD*	*eQAPP RPD*	*Flag*
LEAD	20.3	18.5	9	50.00	No Qualifiers Applied

Project Name and Number: 06261038.0000 - Castner Range Fort Bliss, TX

LDC #: 36618B4a
SDG #: K1605069
Laboratory: ALS Environmental

VALIDATION COMPLETENESS WORKSHEET

ADR IV

Date: 7/13/16

[redacted]

METHOD: Metals (EPA SW 846 Method 6020A)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A/N	
II.	ICP/MS Tune	A	
III.	Instrument Calibration	A	
IV.	ICP Interference Check Sample (ICS) Analysis	A	
V.	Laboratory Blanks	SW	ICB/CCB only
VI.	Field Blanks	N	
VII.	Matrix Spike/Matrix Spike Duplicates	SW	Not reviewed for ADR validation.
VIII.	Duplicate sample analysis	N	Not reviewed for ADR validation.
IX.	Serial Dilution	A	
X.	Laboratory control samples	N	Not reviewed for ADR validation. LCS
XI.	Field Duplicates	SW (for split samples only)	Not reviewed for ADR validation. *see below (15,16)(3,4)
XII.	Internal Standard (ICP-MS)	A	
XIII.	Sample Result Verification	N	Not reviewed for ADR validation.
XIV	Overall Assessment of Data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

** Indicates sample underwent Level IV validation

	Client ID	Lab ID	Matrix	Date
1	FTBL-SED-25-0-6-051016	K1605069-001	Sediment	05/10/16
2	FTBL-SED-11-0-6-051016	K1605069-002	Sediment	05/10/16
3	FTBL-SED-12-0-6-051016	K1605069-003	Sediment	05/10/16
4	FD051016	K1605069-004	Sediment	05/10/16
5	FTBL-SED-13-0-6-051016**	K1605069-005**	Sediment	05/10/16
6	FTBL-SED-20-0-6-051116**	K1605069-006**	Sediment	05/11/16
7	FTBL-SED-20-12-18-051116**	K1605069-007**	Sediment	05/11/16
8	FTBL-SED-19-0-6-051116**	K1605069-008**	Sediment	05/11/16
9	FTBL-SED-19-12-18-051116**	K1605069-009**	Sediment	05/11/16
10	FTBL-SED-18-0-6-051116**	K1605069-010**	Sediment	05/11/16
11	FTBL-SED-17-0-6-051116**	K1605069-011**	Sediment	05/11/16
12	FTBL-SED-16-0-6-051116	K1605069-012	Sediment	05/11/16
13	FTBL-SED-52-0-6-051116	K1605069-013	Sediment	05/11/16
14	FTBL-SED-01-0-6-051216	K1605069-014	Sediment	05/12/16
15	FTBL-SED-02-0-6-051216	K1605069-015	Sediment	05/12/16

* split = (3, FTBL-SED-12-0-6-051016 (SDG: FA33973))
= (15, FTBL-SED-02-0-6-051216-QA ↓)

LDC #: 36618B4a
SDG #: K1605069
Laboratory: ALS Environmental

VALIDATION COMPLETENESS WORKSHEET
ADR/IV

Date: 7/13/16
[redacted]

METHOD: Metals (EPA SW 846 Method 6020A)

	Client ID	Lab ID	Matrix	Date
16	FD051216	K1605069-016	Sediment	05/12/16
17	FTBL-SED-03-0-6-051216	K1605069-017	Sediment	05/12/16
18	FTBL-SED-04-0-6-051216	K1605069-018	Sediment	05/12/16
19	FTBL-SED-05-0-6-051216	K1605069-019	Sediment	05/12/16
20	FTBL-SED-25-0-6-051016MS	K1605069-001MS	Sediment	05/10/16
21	FTBL-SED-25-0-6-051016MSD	K1605069-001MSD	Sediment	05/10/16
22				
23				
24				
25				
26				

Notes:

LDC #: 36618B4a

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

[redacted]

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000) Soil preparation factor applied: 100x x 5xdil
Sample Concentration units, unless otherwise noted: ug/L Associated Samples: 13-19

				Sample Identification										
Analyte	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Level	No qualifiers (>5x)										
Sb		0.020	0.05											

Sample Concentration units, unless otherwise noted: ug/L Associated Samples: 1-12

				Sample Identification										
Analyte	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Level	No qualifiers (>5x)										
Sb		0.021	0.0525											

Samples with analyte concentrations within five times the associated ICB, CCB or PB concentration are listed above with the identifications from the Validation Completeness Worksheet. These sample results were qualified as not detected, "U".
Note : a - The listed analyte concentration is the highest ICB, CCB, or PB detected in the analysis of each element.

LDC#: 36408A4b

VALIDATION FINDINGS WORKSHEET
Split Duplicates

[redacted]

METHOD: Metals (EPA Method 6010B/7000)

Analyte	Concentration (mg/Kg)		RPD (≤50)	Qualifiers (Parents Only)
	3	FTBL-SED-12-0-6-051016-QA		
Antimony	0.263	2.1U	155	~~NQ (<LOQ)~~ J/UJ/A
Arsenic	9.13	17.2	61	Jdet/A
Beryllium	2.08	1.5	32	
Copper	32.2	29.3	9	
Lead	36.0	34.8	3	
Nickel	15.3	13.9	10	
Zinc	318	309	3	

Analyte	Concentration (mg/Kg)		RPD (≤50)	Qualifiers (Parents Only)
	15	FTBL-SED-02-0-6-051216-QA		
Antimony	0.228	9.5U	191	~~NQ (<LOQ)~~ J/UJ/A
Arsenic	6.21	8.0	25	
Beryllium	3.12	3.2	3	
Copper	13.9	13.1	6	
Lead	20.3	20.8	2	
Nickel	6.74	7.1	5	
Zinc	45.1	60.3	29	

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Enclosure II

Level IV Data Validation Reports

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Fort Bliss, Castner Range

LDC Report Date: July 20, 2016

Parameters: Metals

Validation Level: Level IV

Laboratory: ALS Environmental

Sample Delivery Group (SDG): K1605069

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
FTBL-SED-13-0-6-051016	K1605069-005	Sediment	05/10/16
FTBL-SED-20-0-6-051116	K1605069-006	Sediment	05/11/16
FTBL-SED-20-12-18-051116	K1605069-007	Sediment	05/11/16
FTBL-SED-19-0-6-051116	K1605069-008	Sediment	05/11/16
FTBL-SED-19-12-18-051116	K1605069-009	Sediment	05/11/16
FTBL-SED-18-0-6-051116	K1605069-010	Sediment	05/11/16
FTBL-SED-17-0-6-051116	K1605069-011	Sediment	05/11/16

Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Final Quality Assurance Project Plan, Military Munitions Response Program Remedial Investigation, Closed Castner Firing Range, Fort Bliss, El Paso, Texas (February 2015), the U.S. Department of Defense (DoD) Quality Systems Manual (QSM) for Environmental Laboratories, Version 5.0 (July 2013), and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines (CLPNFG) for Inorganic Superfund Data Review (October 2004). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Antimony, Arsenic, Beryllium, Copper, Lead, Nickel, and Zinc by Environmental Protection Agency (EPA) SW 846 Method 6020A

All sample results were subjected to Level IV evaluation, which is comprised of the quality control (QC) summary forms as well as the raw data, to confirm sample quantitation and identification.

The following are definitions of the data qualifiers utilized during data validation:

J (Estimated): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated due to non-conformances discovered during data validation.

U (Non-detected): The compound or analyte was analyzed for and positively identified by the laboratory; however the compound or analyte should be considered non-detected at the reported concentration due to the presence of contaminants detected in the associated blank(s).

UJ (Non-detected estimated): The compound or analyte was reported as not detected by the laboratory; however the reported quantitation/detection limit is estimated due to non-conformances discovered during data validation.

R (Rejected): The sample results were rejected due to gross non-conformances discovered during data validation. Data qualified as rejected is not usable.

NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected compound or analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

I. Sample Receipt and Technical Holding Times

All samples were received in good condition.

All technical holding time requirements were met.

II. ICPMS Tune

The mass calibration was within 0.1 AMU and the percent relative standard deviation (%RSD) was less than or equal to 5%.

III. Instrument Calibration

Initial and continuing calibrations were performed as required by the method.

The initial calibration verification (ICV) and continuing calibration verification (CCV) standards were within QC limits.

IV. ICP Interference Check Sample Analysis

The frequency of interference check sample (ICS) analysis was met. All criteria were within QC limits.

V. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks with the following exceptions:

Blank ID	Analyte	Maximum Concentration	Associated Samples
ICB/CCB	Antimony	0.021 ug/L	All samples in SDG K1605069

Data qualification by the laboratory blanks was based on the maximum contaminant concentration in the laboratory blanks in the analysis of each analyte. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated laboratory blanks.

VI. Field Blanks

No field blanks were identified in this SDG.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on an associated project sample. Percent recoveries (%R) and relative percent differences (RPD) were not within QC limits. No data were qualified since there were no associated samples in this SDG.

VIII. Duplicate Sample Analysis

The laboratory has indicated that there were no duplicate (DUP) analyses specified for the samples in this SDG, and therefore duplicate analyses were not performed for this SDG.

IX. Serial Dilution

Serial dilution analysis was performed on an associated project sample. The percent differences (%D) were within QC limits.

X. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

XI. Field Duplicates

No field duplicates were identified in this SDG.

XII. Internal Standards (ICP-MS)

All internal standard percent recoveries (%R) were within QC limits.

XIII. Sample Result Verification

All sample result verifications were acceptable.

XIV. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

The quality control criteria reviewed were met and are considered acceptable. Based upon the data validation all results are considered valid and usable for all purposes.

Fort Bliss, Castner Range
Metals - Data Qualification Summary - SDG K1605069

No Sample Data Qualified in this SDG

Fort Bliss, Castner Range
Metals - Laboratory Blank Data Qualification Summary - SDG K1605069

No Sample Data Qualified in this SDG

Fort Bliss, Castner Range
Metals - Field Blank Data Qualification Summary - SDG K1605069

No Sample Data Qualified in this SDG

LDC #: 36618B4a

SDG #: K1605069

Laboratory: ALS Environmental

VALIDATION COMPLETENESS WORKSHEET

~~ADR~~/IV

Date: 7/3/16

[redacted]

METHOD: Metals (EPA SW 846 Method 6020A)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A/A	
II.	ICP/MS Tune	A	
III.	Instrument Calibration	A	
IV.	ICP Interference Check Sample (ICS) Analysis	A	
V.	Laboratory Blanks	SW	~~ICB/CCB only~~
VI.	Field Blanks	N	
VII.	Matrix Spike/Matrix Spike Duplicates	SW	Not reviewed for ADR validation. MS/D
VIII.	Duplicate sample analysis	N	Not reviewed for ADR validation.
IX.	Serial Dilution	A	
X.	Laboratory control samples	A	Not reviewed for ADR validation. LCS
XI.	Field Duplicates	N	Not reviewed for ADR validation.
XII.	Internal Standard (ICP-MS)	A	
XIII.	Sample Result Verification	A	Not reviewed for ADR validation.
XIV.	Overall Assessment of Data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

** Indicates sample underwent Level IV validation

	Client ID	Lab ID	Matrix	Date
1	~~FTBL-SED-25-0-6-051016~~	K1605069-001	Sediment	~~05/10/16~~
2	FTBL-SED-11-0-6-051016	K1605069-002	Sediment	05/10/16
3	FTBL-SED-12-0-6-051016	K1605069-003	Sediment	05/10/16
4	~~FD051016~~	~~K1605069-004~~	~~Sediment~~	05/10/16
5	FTBL-SED-13-0-6-051016**	K1605069-005**	Sediment	05/10/16
6	FTBL-SED-20-0-6-051116**	K1605069-006**	Sediment	05/11/16
7	FTBL-SED-20-12-18-051116**	K1605069-007**	Sediment	05/11/16
8	FTBL-SED-19-0-6-051116**	K1605069-008**	Sediment	05/11/16
9	FTBL-SED-19-12-18-051116**	K1605069-009**	Sediment	05/11/16
10	FTBL-SED-18-0-6-051116**	K1605069-010**	Sediment	05/11/16
11	FTBL-SED-17-0-6-051116**	K1605069-011**	Sediment	05/11/16
12	~~FTBL-SED-16-0-6-051116~~	~~K1605069-012~~	~~Sediment~~	~~05/11/16~~
13	FTBL-SED-52-0-6-051116	K1605069-013	Sediment	05/11/16
14	FTBL-SED-01-0-6-051216	K1605069-014	Sediment	05/12/16
15	~~FTBL-SED-02-0-6-051216~~	K1605069-015	Sediment	~~05/12/16~~

LDC #: 36618B4a

SDG #: K1605069

Laboratory: ALS Environmental

VALIDATION COMPLETENESS WORKSHEET

ADR/IV

Date: 7/13/16

[redacted]

METHOD: Metals (EPA SW 846 Method 6020A)

	Client ID	Lab ID	Matrix	Date
16	FD051216	K1605069-016	Sediment	05/12/16
17	FTBL-SED-03-0-6-051216	K1605069-017	Sediment	05/12/16
18	FTBL-SED-04-0-6-051216	K1605069-018	Sediment	05/12/16
19	FTBL-SED-05-0-6-051216	K1605069-019	Sediment	05/12/16
20	FTBL-SED-25-0-6-051016MS	K1605069-001MS	Sediment	05/10/16
21	FTBL-SED-25-0-6-051016MSD	K1605069-001MSD	Sediment	05/10/16
22				
23				
24				
25				
26				

Notes:

LDC #: 36618B4a

VALIDATION FINDINGS CHECKLIST

[redacted]

Method: Metals (EPA SW 846 Method 6010/6020/7000)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. ICP/MS Tune				
Were all isotopes in the tuning solution mass resolution within 0.1 amu?	✓			
Were %RSD of isotopes in the tuning solution ≤5%?	✓			
III. Calibration				
Were all instruments calibrated daily, each set-up time?	✓			
Were the proper number of standards used?	✓			
Were all initial and continuing calibration verification %Rs within the 90-110% (80-120% for mercury) QC limits?	✓			
Were the low standard checks within 70-130%	✓			
Were all initial calibration correlation coefficients within limits as specified by the method?	✓			
IV. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	✓			
V. ICP Interference Check Sample				
Were ICP interference check samples performed daily?	✓			
Were the AB solution percent recoveries (%R) with the 80-120% QC limits?	✓			
VI. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and duplicate (DUP) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD or MS/DUP. Soil / Water.	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the 75-125 QC limits? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.		✓		
Were the MS/MSD or duplicate relative percent differences (RPD) ≤ 20% for waters and ≤ 35% for soil samples? A control limit of +/- RL(+/-2X RL for soil) was used for samples that were ≤ 5X the RL, including when only one of the duplicate sample values were ≤ 5X the RL.	✓			
VII. Laboratory control samples	✓			
Was an LCS anaylzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the 80-120% QC limits for water samples and laboratory established QC limits for soils?				

LDC #: 36615B4a

VALIDATION FINDINGS CHECKLIST

[redacted]

Validation Area	Yes	No	NA	Findings/Comments
VIII. Internal Standards (EPA SW 846 Method 6020/EPA 200.8)				
Were all the percent recoveries (%R) within the 30-120% (6020)/60-125% (200.8) of the intensity of the internal standard in the associated initial calibration?	✓			
If the %Rs were outside the criteria, was a reanalysis performed?			✓	
IX. ICP Serial Dilution				
Was an ICP serial dilution analyzed if analyte concentrations were > 50X the MDL (ICP)/>100X the MDL(ICP/MS)?	✓			
Were all percent differences (%Ds) < 10%?	✓			
Was there evidence of negative interference? If yes, professional judgement will be used to qualify the data.			✓	
X. Sample Result Verification				
Were RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XI. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XII. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target analytes were detected in the field duplicates.			✓	
XIII. Field blanks				
Field blanks were identified in this SDG.		✓		
Target analytes were detected in the field blanks.			✓	

LDC #: 36884a

VALIDATION FINDINGS WORKSHEET
Sample Specific Element Reference

[redacted]

All circled elements are applicable to each sample.

Sample ID	Matrix	Target Analyte List (TAL)
1-19		Al, (Sb) (As) Ba (Be) Cd, Ca, Cr, Co, (Cu) Fe, (Pb) Mg, Mn, Hg, (Ni) K, Se, Ag, Na, Tl, V, (Zn) Mo, B, Sn, Ti, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___
QL: 20, 21		Al, (Sb) (As) Ba, (Be) Cd, Ca, Cr, Co, (Cu) Fe (Pb) Mg, Mn, Hg, (Ni) K, Se, Ag, Na, Tl, V, (Zn) Mo, B, Sn, Ti, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___
Analysis Method		
ICP		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___
ICP-MS		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___
GFAA		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___

Comments: Mercury by CVAA if performed

LDC #: 36618B4a

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000) Soil preparation factor applied: 100x x 5xdil

[redacted]

Sample Concentration units, unless otherwise noted: ug/L Associated Samples: All

				Sample Identification										
Analyte	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Level	No qualifiers (>5x)										
Sb		0.021	0.0525											

Samples with analyte concentrations within five times the associated ICB, CCB or PB concentration are listed above with the identifications from the Validation Completeness Worksheet. These sample results were qualified as not detected, "U".

Note : a - The listed analyte concentration is the highest ICB, CCB, or PB detected in the analysis of each element.

LDC #: 36618B4

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

[redacted]

METHOD: Trace metals (EPA SW 846 Method 6010B/6020A/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a matrix spike analyzed for each matrix in this SDG?

Y N N/A Were matrix spike percent recoveries (%R) within the control limits of 75-125? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.

Y N N/A Were all duplicate sample relative percent differences (RPD) ≤ 20% for water samples and ≤35% for soil samples?

LEVEL IV ONLY:

Y N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	MS/MSD ID	Matrix	Analyte	MS %Recovery	MSD %Recovery	RPD (Limits)	Associated Samples	Qualifications
	20/21	S	Sb	69 (72-124)	63		None*	J/UJ/A a No Qual
							*associates only	

Comments:

LDC #: 36618B4

VALIDATION FINDINGS WORKSHEET
Initial and Continuing Calibration Calculation Verification

[redacted]

METHOD: Trace metals (EPA SW 846 Method 6010/6020/7000)

An initial and continuing calibration verification percent recovery (%R) was recalculated for each type of analysis using the following formula:

%R = Found x 100 / True

Where, Found = concentration (in ug/L) of each analyte measured in the analysis of the ICV or CCV solution
True = concentration (in ug/L) of each analyte in the ICV or CCV source

Standard ID	Type of Analysis	Element	Found (ug/L)	True (ug/L)	Recalculated %R	Reported %R	Acceptable (Y/N)
	ICP (Initial calibration)						
ICV	ICP/MS (Initial calibration)	Pb	25.5	25.0	102	102	Y
	CVAA (Initial calibration)						
	ICP (Continuing calibration)						
CCV10	ICP/MS (Continuing calibration)	Ni	25.0	25.0	100	100	Y
	CVAA (Continuing calibration)						

Comments:

LDC #: 36183K

VALIDATION FINDINGS WORKSHEET
Level IV Recalculation Worksheet

[redacted]

METHOD: Trace metals (EPA CLP SOW ISM01.2)

Percent recoveries (%R) for an ICP interference check sample, a laboratory control sample and a matrix spike sample were recalculated using the following formula:

$$\%R = \frac{Found}{True} \times 100$$

Where, Found = Concentration of each analyte measured in the analysis of the sample. For the matrix spike calculation, Found = SSR (spiked sample result) - SR (sample result).
True = Concentration of each analyte in the source.

A sample and duplicate relative percent difference (RPD) was recalculated using the following formula:

$$RPD = \frac{|S-D|}{(S+D)/2} \times 100$$

Where, S = Original sample concentration
D = Duplicate sample concentration

An ICP serial dilution percent difference (%D) was recalculated using the following formula:

$$\%D = \frac{|I-SDR|}{I} \times 100$$

Where, I = Initial Sample Result (ug/L)
SDR = Serial Dilution Result (ug/L) (Instrument Reading x 5)

Sample ID	Type of Analysis	Element	Found / S / I (units)	True / D / SDR (units)	Recalculated %R / RPD / %D	Reported %R / RPD / %D	Acceptable (Y/N)
ICSAB	ICP interference check	Zn	22.4	25.0	90	90	Y
LCS	Laboratory control sample	Pb	916.0	1000	92	92	
20	Matrix spike	Sb	(SSR-SR) 67.581	98.4	69	69	
20/21	Duplicate	Ni	129.55	119.13	8.4	8.4	
1	ICP serial dilution	Cu	36.90	36.80	0.3	0.3	

Comments: _____

LDC #: 36618B4a

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

[redacted]

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Have results been reported and calculated correctly?
Y N N/A Are results within the calibrated range of the instruments and within the linear range of the ICP?
Y N N/A Are all detection limits below the CRDL?

Detected analyte results for Zn were recalculated and verified using the following equation:

Concentration = (RD)(FV)(Dil) / (In. Vol.)

RD = Raw data concentration
FV = Final volume (ml)
In. Vol. = Initial volume (ml) or weight (G)
Dil = Dilution factor

Recalculation:

$$\frac{100mL(5)(250.560ug/L)}{0.997(1.27g)(1000)} = 98.9 mg/kg$$

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
	5	Sb	0.156	0.156	Y
	6	As	10.5	10.5	
	7	Be	3.37	3.37	
	8	Cu	19.8	19.8	
	9	Pb	53.7	53.7	
	10	Ni	17.6	17.6	
	11	Zn	98.9	98.9	Y

Note: _____

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June 21, 2016

Analytical Report for Service Request No: K1605069

ARCADIS U.S., Inc.
2929 Briarpark Drive
Suite 300
Houston, TX 77042-3745

RE: Castner Range Fort Bliss, TX / 06261038.0000

Enclosed are the results of the sample(s) submitted to our laboratory May 14, 2016
For your reference, these analyses have been assigned our service request number **K1605069.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is ____ You may also contact me via

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

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Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEC UST	http://dec.alaska.gov/applications/eh/ehllabreports/USTLabs.aspx	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L14-51
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	Not available	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/portal/DIVISIONS/PublicParticipationandPermitSupport/LouisianaLaboratoryAccreditationProgram.aspx	03016
Maine DHS	Not available	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Montana DPHHS	http://www.dphhs.mt.gov/publichealth/	CERT0047
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/oqa/	WA005
North Carolina DWQ	http://www.dwqlab.org/	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/envserv/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wisconsin DNR	http://dnr.wi.gov/	998386840
Wyoming (EPA Region 8)	http://www.epa.gov/region8/water/dwhome/wyomingdi.html	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Case Narrative

ALS Environmental—Kelso Laboratory
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ALS ENVIRONMENTAL

Client:	ARCADIS U.S., Inc.	**Service Request No.:**	K1605069
Project:	Castner Range Fort Bliss, TX/ 06261038.0000	**Date Received:**	05/14/16
Sample Matrix:	Soil		

Case Narrative

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier IV validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Nineteen soil samples were received for analysis at ALS Environmental on 05/14/16. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4ºC upon receipt at the laboratory.

Total Metals

Matrix Spike Recovery Exceptions:
Antimony recoveries are generally low for soil and sediment samples when digested using EPA Method 3050B. Despite anticipated low recoveries, the method is still generally prescribed because of its versatility for general metals analysis. Antimony results (in conjunction with the matrix spike recovery) from this procedure should only be used as indicators to estimate concentrations. The matrix spike and matrix spike duplicate recoveries of Antimony for sample FTBL-SED-25-0-6-051016 were below the ALS control criterion. Since low recoveries resulted from a method defect and were possibly magnified by certain matrix components, no corrective action was appropriate. Alternative procedures that specifically target Antimony are available but were not specified for this project. The associated QA/QC results (e.g. control sample, calibration standards, etc.) indicated the analysis was in control.

No other anomalies associated with the analysis of these samples were observed.

TRRP

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Appendix A ALS Kelso-Laboratory Data Package Signature Page

This data package consists of:

- ☐ This signature page, the laboratory review checklist, and the following reportable data:
- ☐ R1 Field chain-of-custody documentation;
- ☐ R2 Sample identification cross-reference;
- ☐ R3 Test reports (analytical data sheets) for each environmental sample that includes:
  a) Items consistent with NELAC 5.13 or ISO/IEC 17025 Section 5.10
  b) dilution factors,
  c) preparation methods,
  d) cleanup methods, and
  e) if required for the project, tentatively identified compounds (TICs).
- ☐ R4 Surrogate recovery data including:
  a) Calculated recovery (%R), and
  b) The laboratory's surrogate QC limits.
- ☐ R5 Test reports/summary forms for blank samples;
- ☐ R6 Test reports/summary forms for laboratory control samples (LCSs) including:
  a) LCS spiking amounts,
  b) Calculated %R for each analyte, and
  c) The laboratory's LCS QC limits.
- ☐ R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  a) Samples associated with the MS/MSD clearly identified,
  b) MS/MSD spiking amounts,
  c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  d) Calculated %Rs and relative percent differences (RPDs), and
  e) The laboratory's MS/MSD QC limits
- ☐ R8 Laboratory analytical duplicate (if applicable) recovery and precision:
  a) the amount of analyte measured in the duplicate,
  b) the calculated RPD, and
  c) the laboratory's QC limits for analytical duplicates.
- ☐ R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix;
- ☐ R10 Other problems or anomalies.
- ☐ The Exception Report for every "No" or "Not Reviewed (NR)" item in laboratory review checklist.

Release Statement: I am responsible for the release of this laboratory data package. This data package has been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. By me signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

Check, if applicable: [ ] –This laboratory is an in-house laboratory controlled by the person responding to rule. The official signing the cover page of the rule-required report (for example, the APAR) in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Laboratory Review Checklist: Reportable Data								
Laboratory Name: ALS Laboratory Group			LRC Date: 6/24/2016					
Project Name: Castner Range Fort Bliss, TX			Laboratory Job Number: K1605069					
Reviewer Name: (b) (6)			Prep Batch Number(s): 262501					
#[1]	A[2]	**Description**	**Yes**	**No**	**NA[3]**	**NR[4]**	**ER#[5]**
R1	I	**Chain-of-custody (C-I-C)**					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?	X				
R2	I	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	I	**Test reports**					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW-846 Method 5035?	X				
		If required for the project, TICs reported?	X				
R4	I	**Surrogate recovery data**					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	I	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	I	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	I	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	X				
		Were MS/MSD RPDs within laboratory QC limits?		ER1			
R8	I	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	I	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	I	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Were all necessary corrective actions performed for the reported data?	X				
		Was applicable and available technology used to lower the SDL and minimize the matrix interference affects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Program for the analytes, matrices and methods associated with this laboratory data package?	X				

Laboratory Review Checklist: Reportable Data								
Laboratory Name: ALS Laboratory Group			LRC Date: 6/24/2016					
Project Name: Castner Range Fort Bliss, TX			Laboratory Job Number: K1605069					
Reviewer Name: (b) (6)			Prep Batch Number(s): 262501					
#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]	
S1	I	**Initial calibration (ICAL)**						
		Were response factors and/or relative response factors for each analyte within QC limits?	X					
		Were percent RSDs or correlation coefficient criteria met?	X					
		Was the number of standards recommended in the method used for all analytes?	X					
		Were all points generated between the lowest and highest standard used to calculate the curve?	X					
		Are ICAL data available for all instruments used?	X					
		Has the initial calibration curve been verified using an appropriate second source standard?	X					
S2	I	**Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB)**						
		Was the CCV analyzed at the method-required frequency?	X					
		Were percent differences for each analyte within the method-required QC limits?	X					
		Was the ICAL curve verified for each analyte?	X					
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X					
S3	I	**Mass spectral tuning:**						
		Was the appropriate compound for the method used for tuning?	X					
		Were ion abundance data within the method-required QC limits?	X					
S4	I	**Internal standards (IS):**						
		Were IS area counts and retention times within the method-required QC limits?	X					
S5	I	**Raw data** (NELAC section 1 appendix A glossary, and section 5.12 or ISO/IEC 17025 section						
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X					
		Were data associated with manual integrations flagged on the raw data?	X					
S6	I	**Dual column confirmation**						
		Did dual column confirmation results meet the method-required QC?			X			
S7	I	**Tentatively identified compounds (TICs):**						
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X			
S8	I	**Interference Check Sample (ICS) results:**						
		Were percent recoveries within method QC limits?	X					
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**						
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X					
S10	I	**Method detection limit (MDL) studies**						
		Was a MDL study performed for each reported analyte?	X					
		Is the MDL either adjusted or supported by the analysis of DCSs?	X					
S11	I	**Proficiency test reports:**						
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X					
S12	I	**Standards documentation**						
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X					
S13	I	**Compound/analyte identification procedures**						
		Are the procedures for compound/analyte identification documented?	X					
S14	I	**Demonstration of analyst competency (DOC)**						
		Was DOC conducted consistent with NELAC Chapter 5C or ISO/IEC 4?	X					
		Is documentation of the analyst's competency up-to-date and on file?	X					
S15	I	**Verification/validation documentation for methods** (NELAC Chap 5 or ISO/IEC 17025 Section 5)						
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X					
S16	I	**Laboratory standard operating procedures (SOPs):**						
		Are laboratory SOPs current and on file for each method performed?	X					

Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
I = Organic Analyses; I = Inorganic Analyses (and general chemistry, when applicable);
NA = Not Applicable;
NR = Not Reviewed;
R# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Reportable Data		
Laboratory Name: ALS Laboratory Group		LRC Date: 6/24/2016
Project Name: Castner Range Fort Bliss, TX		Laboratory Job Number: K1605069
Reviewer Name: (b) (6)		Prep Batch Number(s): 262501
ER#[5]	**Description**	
1	Antimony recoveries are generally low for soil and sediment samples when digested using EPA Method 3050B. Despite anticipated low recoveries, the method is still generally prescribed because of its versatility for general metals analysis. Antimony results (in conjunction with the matrix spike recovery) from this procedure should only be used as indicators to estimate concentrations. The matrix spike and matrix spike duplicate recoveries of Antimony for sample FTBL-SED- 25-0-6-051016 were below the ALS control criterion. Since low recoveries resulted from a method defect and were possibly magnified by certain matrix components, no corrective action was appropriate. Alternative procedures that specifically target Antimony are available but were not specified for this project. The associated QA/QC results (e.g. control sample, calibration standards, etc.) indicated the analysis was in control.	

Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
I = Organic Analyses; I = Inorganic Analyses (and general chemistry, when applicable);
NA = Not Applicable;
NR = Not Reviewed;
R# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Chain of Custody

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Chain o Custody

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PHONE 1 360 577 7222 FAX 1 360 636 1068

Part of the ALS Group A Campbell Brothers Limited Company

Work Order No.: YI1605029

Project Manager:		Bill to:	PO NUMBER:
Client Name:	Arcadis	Company:	Arcadis
Address:	630 Plaza Dr. Suite [redacted]	Address:	630 Plaza Dr. Suite 600
City, State ZIP:	Highlands Ranch Co[redacted]	City, State ZIP:	Highlands Ranch
[redacted]	[redacted]	Phone: (303) 471-3091	[redacted]
Project Name:	Castner Range Fort Bliss, TX		
Project Number:	00261038.0000		
Sampler's Name:	[redacted]		

SAMPLE RECEIPT

Temperature (°C):			Temp Blank Present		
Received Intact:	Yes	No	N/A	Wet Ice / Blue Ice	
Cooler Custody Seals:	Yes	No	N/A	Total Containers:	
Sample Custody Seals:	Yes	No	N/A		

TAT

- [x] Routine 21day
- [ ] Same Day 100%
- [ ] Next Day ***
- [ ] 3 Day
- [ ] 5 Day 50%

Surcharges. Please call for availability

Due Date:

Sample Identification	Matrix	Date Sampled	Time Sampled	Lab ID	No. of Containers	Sb, As, Be, Cu, Pb, Ni, Zn	Comments
FTBL-SED-29-0-6-050916	S	5-9-16	10:30		1	X	
FTBL-SED-30-0-6-050916	S	5-9-16	11:15		1	X	
FD050916	S	5-9-16	——		1	X	
FTBL-SED-15-0-6-050916	S	5-9-16	13:15		1	X	
FTBL-SED-14-0-6-050916	S	5-9-16	13:40		1	X	
FTBL-SED-21-0-6-051016	S	5-10-16	1000		1	X	
FTBL-SED-22-0-6-051016	S	5-10-16	1030		1	X	
FTBL-SED-23-0-6-051016	S	5-10-16	1045		1	X	
FTBL-SED-24-0-6-051016	S	5-10-16	1110		1	X	
FTBL-SED-25-0-6-051016	S	5-10-16	1130		1	X	
FTBL-SED-11-0-6-051016	S	5-10-16	1430		1	X	

Dissolved	Ag, Al, As, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, K, Li, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Se, Si, Sn, Sr, Tl, V, Zn, Zr
Total	Ag, Al, As, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, K, Li, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Se, Si, Sn, Sr, Tl, V, Zn, Zr

Additional Methods Available Upon Request

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
[redacted]	051316/100[illegible]	[redacted]	5/14/16 1600

Chain o Custody

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Part of the ALS Group A Campbell Brothers Limited Company

Work Order No.: KL1605069

3 of 4

Project Manager:		Bill to:	PO NUMBER:
Client Name:	Arcadis	Company:	Arcadis
Address:	630 Plaza Dr. Suite 6000	Address:	630 Plaza Dr. Suite 6000
[redacted]		ty, State ZIP:	Highlands Ranch
Project Name:	Casner Range Fort Bliss, TX		
Project Number:	00260103B.0000		
Sampler's Nam	[redacted]		

SAMPLE RECEIPT

Temperature (°C):		Temp Blank Present		
Received Intact:	Yes	No	N/A	Wet Ice / Blue Ice
Cooler Custody Seals:	Yes	No	N/A	Total Containers:
Sample Custody Seals:	Yes	No	N/A	

TAT
- [x] Routine 21day
- [ ] Same Day 100%
- [ ] Next Day ***
- [ ] 3 Day
- [ ] 5 Day 50%

Surcharges. Please call for availability

Due Date:

Sample Identification	Matrix	Date Sampled	Time Sampled	Lab ID	No. of Containers	Sb, As, Be, Cu, Pb, Ni, Zn	Comments
FTBL-SED-12-0-6-051016	S	5-10-16	1510		1	X	
FD051016	S	5-10-16	—		1	X	
FTBL-SED-13-0-6-051016	S	5-10-16	1540		1	X	
~~FTBL-SED-04-0-6-050616~~	~~S~~	~~5-6-16~~	~~0955~~		~~1~~	~~X~~	
~~FTBL-SED-04-12-18-050616~~	~~S~~	~~5-6-16~~	~~1005~~		~~1~~	~~X~~	
~~FTBL-SED-~~							
FTBL-SED-20-0-6-051116	S	5-11-16	0940		1	X	
FTBL-SED-20-12-18-051116	S	5-11-16	0950		1	X	
FTBL-SED-19-0-6-051116	S	5-11-16	0955		1	X	
FTBL-SED-19-12-18-051116	S	5-11-16	1005		1	X	
FTBL-SED-18-0-6-051116	S	5-11-16	1015		1	X	

Dissolved	Ag, Al, As, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, K, Li, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Se, Si, Sn, Sr, Tl, V, Zn, Zr
Total	Ag, Al, As, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, K, Li, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Se, Si, Sn, Sr, Tl, V, Zn, Zr

Additional Methods Available Upon Request

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
[redacted]	051316/1000	[redacted]	5/14/16 1020

Chain o Custody

ADDRESS 1317 South 13th Ave., Kelso, WA 98626
PHONE 1 360 577 7222 FAX 1 360 636 1068

Part of the ALS Group A Campbell Brothers Limited Company

Work Order No.:

Kille052069

4 of 4

Project Manager:		Bill to:	PO NUMBER:
Client Name:	Arcadis	Company:	Arcadis
Address:	630 Plaza Dr. Suite	Address:	630 Plaza Dr. Suite 6000
City, State ZIP:	Highlands Ranch CO	City, State ZIP:	Highlands Ranch
[redacted]	[redacted]	[redacted]	[redacted]
Project Number:	00276038.0000	[redacted]	

TAT
- [x] Routine 21day
- [ ] Same Day 100%
- [ ] Next Day ***
- [ ] 3 Day
- [ ] 5 Day 50%

Surcharges. Please call for availability

Due Date:

Temperature (°C):		Temp Blank Present	
Received Intact:	Yes No N/A	Wet Ice / Blue Ice	
Cooler Custody Seals:	Yes No N/A	Total Containers:	
Sample Custody Seals:	Yes No N/A		

Sample Identification	Matrix	Date Sampled	Time Sampled	Lab ID	No. of Containers	Sb, As, Be, Cu, Pb, Ni, Zn	Comments
FTBL-SED-17-0-6-051116	S	5-11-16	1050		1	X	
FTBL-SED-16-0-6-051116	S	5-11-16	1035		1	X	
FTBL-SED-52-0-6-051116	S	5-11-16	1430		1	X	
FTBL-SED-01-0-6-051216	S	5-12-16	0950		1	X	
FTBL-SED-02-0-6-051216	S	5-12-16	1005		1	X	
FD 051216	S	5-12-16	—		1	X	
FTBL-SED-03-0-6-051216	S	5-12-16	1055		1	X	
FTBL-SED-04-0-6-051216	S	5-12-16	1115		1	X	
FTBL-SED-05-0-6-051216	S	5-12-16	1130		1	X	

Dissolved	Ag, Al, As, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, K, Li, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Se, Si, Sn, Sr, Tl, V, Zn, Zr
Total	Ag, Al, As, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, K, Li, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Se, Si, Sn, Sr, Tl, V, Zn, Zr

Additional Methods Available Upon Request

[redacted]	Date/Time	RECEIVED BY Print Name	Signature	Date/Time
	051316/10	[redacted]		5/14/16 1020

[redacted]

Cooler Receipt and Preservation Form

Client Arcadis Service Request K16 050169

Received: 5/14/16 Opened: 5/14/16 By: S Unloaded: 5/14/16 By: [illegible]

1. Samples were received via? *Mail* (*Fed Ex*) *UPS* *DHL* *PDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) (*Cooler*) *Box* *Envelope* *Other* _____ *NA*
3. Were custody seals on coolers? NA (Y) N If yes, how many and where? 2 front back
   If present, were custody seals intact? (Y) N If present, were they signed and dated? (Y) N

Raw Cooler Temp	Corrected Cooler Temp	Raw Temp Blank	Corrected Temp Blank	Corr. Factor	Thermometer ID	Cooler/COC ID NA	Tracking Number NA	Filed
-0.7	-0.5	1.2	1.1	-0.1	327		783611111328	
0.6	0.3	0.3	0.0	-0.3	350		8094 0906 3377	

4. Packing material: *Inserts* *Baggies* (*Bubble Wrap*) *Gel Packs* (*Wet Ice*) *Dry Ice* *Sleeves* _____
5. Were custody papers properly filled out (ink, signed, etc.)? NA (Y) N
6. Did all bottles arrive in good condition (unbroken)? *Indicate in the table below.* NA (Y) N
7. Were all sample labels complete (i.e analysis, preservation, etc.)? NA (Y) N
8. Did all sample labels and tags agree with custody papers? *Indicate major discrepancies in the table on page 2.* NA (Y) N
9. Were appropriate bottles/containers and volumes received for the tests indicated? NA (Y) N
10. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* (NA) Y N
11. Were VOA vials received without headspace? *Indicate in the table below.* (NA) Y N
12. Was C12/Res negative? (NA) Y N

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Out of Temp	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, & Resolutions: _____

Page____of____

Total Solids

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Analytical Report

Client:	ARCADIS U.S., Inc.	**Service Request:**	K1605069
Project:	Castner Range Fort Bliss, TX/06261038.0000	**Date Collected:**	05/10/16 - 05/12/16
Sample Matrix:	Soil	**Date Received:**	05/14/16
Analysis Method:	160.3 Modified	**Units:**	Percent
Prep Method:	None	**Basis:**	As Received

Solids, Total

Sample Name	Lab Code	Result	MRL	MDL	Dil.	Date Analyzed	Q
FTBL-SED-25-0-6-051016	K1605069-001	**99.6**	-	-	1	05/31/16 15:28	
FTBL-SED-11-0-6-051016	K1605069-002	**99.9**	-	-	1	05/31/16 15:28	
FTBL-SED-12-0-6-051016	K1605069-003	**99.5**	-	-	1	05/31/16 15:28	
FD051016	K1605069-004	**99.6**	-	-	1	05/31/16 15:28	
FTBL-SED-13-0-6-051016	K1605069-005	**99.7**	-	-	1	05/31/16 15:28	
FTBL-SED-20-0-6-051116	K1605069-006	**98.8**	-	-	1	05/31/16 15:28	
FTBL-SED-20-12-18-051116	K1605069-007	**98.0**	-	-	1	05/31/16 15:28	
FTBL-SED-19-0-6-051116	K1605069-008	**99.5**	-	-	1	05/31/16 15:28	
FTBL-SED-19-12-18-051116	K1605069-009	**99.0**	-	-	1	05/31/16 15:28	
FTBL-SED-18-0-6-051116	K1605069-010	**99.4**	-	-	1	05/31/16 15:28	
FTBL-SED-17-0-6-051116	K1605069-011	**99.7**	-	-	1	05/31/16 15:28	
FTBL-SED-16-0-6-051116	K1605069-012	**99.6**	-	-	1	05/31/16 15:28	
FTBL-SED-52-0-6-051116	K1605069-013	**99.7**	-	-	1	05/31/16 15:28	
FTBL-SED-01-0-6-051216	K1605069-014	**99.5**	-	-	1	05/31/16 15:28	
FTBL-SED-02-0-6-051216	K1605069-015	**98.7**	-	-	1	05/31/16 15:28	
FD051216	K1605069-016	**98.7**	-	-	1	05/31/16 15:28	
FTBL-SED-03-0-6-051216	K1605069-017	**98.3**	-	-	1	05/31/16 15:28	
FTBL-SED-04-0-6-051216	K1605069-018	**98.9**	-	-	1	05/31/16 15:28	
FTBL-SED-05-0-6-051216	K1605069-019	**98.1**	-	-	1	05/31/16 15:28	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	ARCADIS U.S., Inc.	**Service Request:**	K1605069
Project	Castner Range Fort Bliss, TX/06261038.0000	**Date Collected:**	05/10/16 - 05/11/16
Sample Matrix:	Soil	**Date Received:**	05/14/16
Analysis Method:	160.3 Modified	**Units:**	Percent
Prep Method:	None	**Basis:**	As Received

Replicate Sample Summary
Inorganic Parameters

Sample Name:	Lab Code:	MRL	Sample Result	Duplicate Result	Average	RPD	RPD Limit	Date Analyzed
FTBL-SED-25-0-6-051016	K1605069-001DUP	-	99.6	99.7	99.7	<1	20	05/31/16
FTBL-SED-17-0-6-051116	K1605069-011DUP	-	99.7	99.7	99.7	<1	20	05/31/16

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Metals

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Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client:	ARCADIS U.S., Inc.	**Service Request:**	K1605069
Project No.:	06261038.0000	**Date Collected:**	05/10/16
Project Name:	Castner Range Fort Bliss, TX	**Date Received:**	05/14/16
Matrix:	SOIL	**Units:**	mg/Kg
		Basis:	DRY

Sample Name: **FTBL-SED-25-0-6-051016** **Lab Code:** **K1605069-001**

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.050	0.025	0.010	5.0	05/23/16	05/26/16	0.070		J
Arsenic	6020A	0.50	0.10	0.04	5.0	05/23/16	05/26/16	3.09		
Beryllium	6020A	0.020	0.020	0.005	5.0	05/23/16	05/26/16	0.943		
Copper	6020A	0.10	0.10	0.04	5.0	05/23/16	05/26/16	18.5		
Lead	6020A	0.05	0.05	0.02	5.0	05/23/16	05/26/16	10.4		
Nickel	6020A	0.20	0.10	0.03	5.0	05/23/16	05/26/16	26.3		
Zinc	6020A	0.5	0.5	0.2	5.0	05/23/16	05/26/16	72.2		

% Solids: **99.6**

Comments:

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1605069
Date Collected: 05/10/16
Date Received: 05/14/16
Units: mg/Kg
Basis: DRY

Sample Name: FTBL-SED-11-0-6-051016 **Lab Code:** K1605069-002

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.043	0.021	0.009	5.0	05/23/16	05/26/16	0.183		J
Arsenic	6020A	0.43	0.09	0.03	5.0	05/23/16	05/26/16	7.00		
Beryllium	6020A	0.017	0.017	0.004	5.0	05/23/16	05/26/16	1.81		
Copper	6020A	0.09	0.09	0.03	5.0	05/23/16	05/26/16	16.8		
Lead	6020A	0.04	0.04	0.02	5.0	05/23/16	05/26/16	21.6		
Nickel	6020A	0.17	0.09	0.03	5.0	05/23/16	05/26/16	10.3		
Zinc	6020A	0.4	0.4	0.2	5.0	05/23/16	05/26/16	185		

% Solids: 99.9

Comments:

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client:	ARCADIS U.S., Inc.	**Service Request:**	K1605069
Project No.:	06261038.0000	**Date Collected:**	05/10/16
Project Name:	Castner Range Fort Bliss, TX	**Date Received:**	05/14/16
Matrix:	SOIL	**Units:**	mg/Kg
		Basis:	DRY

Sample Name: **FTBL-SED-12-0-6-051016** **Lab Code:** **K1605069-003**

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.040	0.020	0.008	5.0	05/23/16	05/26/16	0.263		J
Arsenic	6020A	0.40	0.08	0.03	5.0	05/23/16	05/26/16	9.13		
Beryllium	6020A	0.016	0.016	0.004	5.0	05/23/16	05/26/16	2.08		
Copper	6020A	0.08	0.08	0.03	5.0	05/23/16	05/26/16	32.2		
Lead	6020A	0.04	0.04	0.02	5.0	05/23/16	05/26/16	36.0		
Nickel	6020A	0.16	0.08	0.02	5.0	05/23/16	05/26/16	15.3		
Zinc	6020A	0.4	0.4	0.2	5.0	05/23/16	05/26/16	318		

% Solids: **99.5**

Comments:

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1605069
Date Collected: 05/10/16
Date Received: 05/14/16
Units: mg/Kg
Basis: DRY

Sample Name: FD051016 **Lab Code:** K1605069-004

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.044	0.022	0.009	5.0	05/23/16	05/26/16	0.214		J
Arsenic	6020A	0.44	0.09	0.04	5.0	05/23/16	05/26/16	8.43		
Beryllium	6020A	0.018	0.018	0.004	5.0	05/23/16	05/26/16	1.98		
Copper	6020A	0.09	0.09	0.04	5.0	05/23/16	05/26/16	28.9		
Lead	6020A	0.04	0.04	0.02	5.0	05/23/16	05/26/16	29.5		
Nickel	6020A	0.18	0.09	0.03	5.0	05/23/16	05/26/16	16.8		
Zinc	6020A	0.4	0.4	0.2	5.0	05/23/16	05/26/16	352		

% Solids: 99.6

Comments:

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1605069
Date Collected: 05/10/16
Date Received: 05/14/16
Units: mg/Kg
Basis: DRY

Sample Name: FTBL-SED-13-0-6-051016 **Lab Code:** K1605069-005

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.040	0.020	0.008	5.0	05/23/16	05/26/16	0.156		J
Arsenic	6020A	0.40	0.08	0.03	5.0	05/23/16	05/26/16	8.55		
Beryllium	6020A	0.016	0.016	0.004	5.0	05/23/16	05/26/16	1.25		
Copper	6020A	0.08	0.08	0.03	5.0	05/23/16	05/26/16	18.5		
Lead	6020A	0.04	0.04	0.02	5.0	05/23/16	05/26/16	22.7		
Nickel	6020A	0.16	0.08	0.02	5.0	05/23/16	05/26/16	13.3		
Zinc	6020A	0.4	0.4	0.2	5.0	05/23/16	05/26/16	137		

% Solids: 99.7

Comments:

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1605069
Date Collected: 05/11/16
Date Received: 05/14/16
Units: mg/Kg
Basis: DRY

Sample Name: FTBL-SED-20-0-6-051116 **Lab Code:** K1605069-006

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.039	0.019	0.008	5.0	05/23/16	05/26/16	0.342		J
Arsenic	6020A	0.39	0.08	0.03	5.0	05/23/16	05/26/16	10.5		
Beryllium	6020A	0.016	0.016	0.004	5.0	05/23/16	05/26/16	3.44		
Copper	6020A	0.08	0.08	0.03	5.0	05/23/16	05/26/16	22.1		
Lead	6020A	0.04	0.04	0.02	5.0	05/23/16	05/26/16	36.7		
Nickel	6020A	0.16	0.08	0.02	5.0	05/23/16	05/26/16	14.3		
Zinc	6020A	0.4	0.4	0.2	5.0	05/23/16	05/26/16	271		

% Solids: 98.8

Comments:

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client:	ARCADIS U.S., Inc.	**Service Request:**	K1605069
Project No.:	06261038.0000	**Date Collected:**	05/11/16
Project Name:	Castner Range Fort Bliss, TX	**Date Received:**	05/14/16
Matrix:	SOIL	**Units:**	mg/Kg
		Basis:	DRY

Sample Name: **FTBL-SED-20-12-18-051116** **Lab Code:** **K1605069-007**

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.040	0.020	0.008	5.0	05/23/16	05/26/16	0.308		J
Arsenic	6020A	0.40	0.08	0.03	5.0	05/23/16	05/26/16	9.68		
Beryllium	6020A	0.016	0.016	0.004	5.0	05/23/16	05/26/16	3.37		
Copper	6020A	0.08	0.08	0.03	5.0	05/23/16	05/26/16	20.0		
Lead	6020A	0.04	0.04	0.02	5.0	05/23/16	05/26/16	33.3		
Nickel	6020A	0.16	0.08	0.02	5.0	05/23/16	05/26/16	13.2		
Zinc	6020A	0.4	0.4	0.2	5.0	05/23/16	05/26/16	247		

% Solids: **98.0**

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client:	ARCADIS U.S., Inc.	**Service Request:**	K1605069
Project No.:	06261038.0000	**Date Collected:**	05/11/16
Project Name:	Castner Range Fort Bliss, TX	**Date Received:**	05/14/16
Matrix:	SOIL	**Units:**	mg/Kg
		Basis:	DRY

Sample Name: **FTBL-SED-19-0-6-051116** **Lab Code:** **K1605069-008**

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.040	0.020	0.008	5.0	05/23/16	05/26/16	0.315		J
Arsenic	6020A	0.40	0.08	0.03	5.0	05/23/16	05/26/16	10.3		
Beryllium	6020A	0.016	0.016	0.004	5.0	05/23/16	05/26/16	3.25		
Copper	6020A	0.08	0.08	0.03	5.0	05/23/16	05/26/16	19.8		
Lead	6020A	0.04	0.04	0.02	5.0	05/23/16	05/26/16	32.5		
Nickel	6020A	0.16	0.08	0.02	5.0	05/23/16	05/26/16	12.9		
Zinc	6020A	0.4	0.4	0.2	5.0	05/23/16	05/26/16	257		

% Solids: **99.5**

Comments:

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1605069
Date Collected: 05/11/16
Date Received: 05/14/16
Units: mg/Kg
Basis: DRY

Sample Name: FTBL-SED-19-12-18-051116 **Lab Code:** K1605069-009

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.038	0.019	0.008	5.0	05/23/16	05/26/16	0.393		J
Arsenic	6020A	0.38	0.08	0.03	5.0	05/23/16	05/26/16	33.0		
Beryllium	6020A	0.015	0.015	0.004	5.0	05/23/16	05/26/16	3.74		
Copper	6020A	0.08	0.08	0.03	5.0	05/23/16	05/26/16	18.9		
Lead	6020A	0.04	0.04	0.02	5.0	05/23/16	05/26/16	53.7		
Nickel	6020A	0.15	0.08	0.02	5.0	05/23/16	05/26/16	12.3		
Zinc	6020A	0.4	0.4	0.2	5.0	05/23/16	05/26/16	378		

% Solids: 99.0

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1605069
Date Collected: 05/11/16
Date Received: 05/14/16
Units: mg/Kg
Basis: DRY

Sample Name: FTBL-SED-18-0-6-051116 **Lab Code:** K1605069-010

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.040	0.020	0.008	5.0	05/23/16	05/26/16	0.400		J
Arsenic	6020A	0.40	0.08	0.03	5.0	05/23/16	05/26/16	13.8		
Beryllium	6020A	0.016	0.016	0.004	5.0	05/23/16	05/26/16	2.61		
Copper	6020A	0.08	0.08	0.03	5.0	05/23/16	05/26/16	27.2		
Lead	6020A	0.04	0.04	0.02	5.0	05/23/16	05/26/16	76.3		
Nickel	6020A	0.16	0.08	0.02	5.0	05/23/16	05/26/16	17.6		
Zinc	6020A	0.4	0.4	0.2	5.0	05/23/16	05/26/16	924		

% Solids: 99.4

Comments:

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1605069
Date Collected: 05/11/16
Date Received: 05/14/16
Units: mg/Kg
Basis: DRY

Sample Name: FTBL-SED-17-0-6-051116 **Lab Code:** K1605069-011

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.039	0.020	0.008	5.0	05/23/16	05/26/16	0.275		J
Arsenic	6020A	0.40	0.08	0.03	5.0	05/23/16	05/26/16	9.06		
Beryllium	6020A	0.016	0.016	0.004	5.0	05/23/16	05/26/16	3.41		
Copper	6020A	0.08	0.08	0.03	5.0	05/23/16	05/26/16	22.3		
Lead	6020A	0.04	0.04	0.02	5.0	05/23/16	05/26/16	33.8		
Nickel	6020A	0.16	0.08	0.02	5.0	05/23/16	05/26/16	6.36		
Zinc	6020A	0.4	0.4	0.2	5.0	05/23/16	05/26/16	98.9		

% Solids: 99.7

Comments:

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1605069
Date Collected: 05/11/16
Date Received: 05/14/16
Units: mg/Kg
Basis: DRY

Sample Name: FTBL-SED-16-0-6-051116 **Lab Code:** K1605069-012

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.036	0.018	0.007	5.0	05/23/16	05/26/16	0.328		J
Arsenic	6020A	0.36	0.07	0.03	5.0	05/23/16	05/26/16	60.1		
Beryllium	6020A	0.015	0.015	0.004	5.0	05/23/16	05/26/16	4.47		
Copper	6020A	0.07	0.07	0.03	5.0	05/23/16	05/26/16	17.8		
Lead	6020A	0.04	0.04	0.02	5.0	05/23/16	05/26/16	26.1		
Nickel	6020A	0.15	0.07	0.02	5.0	05/23/16	05/26/16	6.21		
Zinc	6020A	0.4	0.4	0.1	5.0	05/23/16	05/26/16	146		

% Solids: 99.6

Comments:

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1605069
Date Collected: 05/11/16
Date Received: 05/14/16
Units: mg/Kg
Basis: DRY

Sample Name: FTBL-SED-52-0-6-051116 **Lab Code:** K1605069-013

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.035	0.018	0.007	5.0	05/23/16	05/26/16	0.164		J
Arsenic	6020A	0.35	0.07	0.03	5.0	05/23/16	05/26/16	3.98		
Beryllium	6020A	0.014	0.014	0.004	5.0	05/23/16	05/26/16	1.14		
Copper	6020A	0.07	0.07	0.03	5.0	05/23/16	05/26/16	10.2		
Lead	6020A	0.04	0.04	0.01	5.0	05/23/16	05/27/16	15.5		
Nickel	6020A	0.14	0.07	0.02	5.0	05/23/16	05/26/16	8.67		
Zinc	6020A	0.4	0.4	0.1	5.0	05/23/16	05/26/16	37.5		

% Solids: 99.7

Comments:

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1605069
Date Collected: 05/12/16
Date Received: 05/14/16
Units: mg/Kg
Basis: DRY

Sample Name: FTBL-SED-01-0-6-051216 **Lab Code:** K1605069-014

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.039	0.020	0.008	5.0	05/23/16	05/26/16	0.173		J
Arsenic	6020A	0.39	0.08	0.03	5.0	05/23/16	05/26/16	4.30		
Beryllium	6020A	0.016	0.016	0.004	5.0	05/23/16	05/26/16	5.03		
Copper	6020A	0.08	0.08	0.03	5.0	05/23/16	05/26/16	12.9		
Lead	6020A	0.04	0.04	0.02	5.0	05/23/16	05/27/16	11.1		
Nickel	6020A	0.16	0.08	0.02	5.0	05/23/16	05/26/16	8.13		
Zinc	6020A	0.4	0.4	0.2	5.0	05/23/16	05/26/16	56.8		

% Solids: 99.5

Comments:

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1605069
Date Collected: 05/12/16
Date Received: 05/14/16
Units: mg/Kg
Basis: DRY

Sample Name: FTBL-SED-02-0-6-051216 **Lab Code:** K1605069-015

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.041	0.020	0.008	5.0	05/23/16	05/26/16	0.228		J
Arsenic	6020A	0.41	0.08	0.03	5.0	05/23/16	05/26/16	6.21		
Beryllium	6020A	0.016	0.016	0.004	5.0	05/23/16	05/26/16	3.12		
Copper	6020A	0.08	0.08	0.03	5.0	05/23/16	05/26/16	13.9		
Lead	6020A	0.04	0.04	0.02	5.0	05/23/16	05/27/16	20.3		
Nickel	6020A	0.16	0.08	0.03	5.0	05/23/16	05/26/16	6.74		
Zinc	6020A	0.4	0.4	0.2	5.0	05/23/16	05/26/16	45.1		

% Solids: 98.7

Comments:

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1605069
Date Collected: 05/12/16
Date Received: 05/14/16
Units: mg/Kg
Basis: DRY

Sample Name: FD051216 **Lab Code:** K1605069-016

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.040	0.020	0.008	5.0	05/23/16	05/26/16	0.204		J
Arsenic	6020A	0.40	0.08	0.03	5.0	05/23/16	05/26/16	6.18		
Beryllium	6020A	0.016	0.016	0.004	5.0	05/23/16	05/26/16	3.04		
Copper	6020A	0.08	0.08	0.03	5.0	05/23/16	05/26/16	13.9		
Lead	6020A	0.04	0.04	0.02	5.0	05/23/16	05/27/16	18.5		
Nickel	6020A	0.16	0.08	0.02	5.0	05/23/16	05/26/16	6.58		
Zinc	6020A	0.4	0.4	0.2	5.0	05/23/16	05/26/16	45.8		

% Solids: 98.7

Comments:

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1605069
Date Collected: 05/12/16
Date Received: 05/14/16
Units: mg/Kg
Basis: DRY

Sample Name: FTBL-SED-03-0-6-051216 **Lab Code:** K1605069-017

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.043	0.022	0.009	5.0	05/23/16	05/26/16	0.211		J
Arsenic	6020A	0.43	0.09	0.03	5.0	05/23/16	05/26/16	6.56		
Beryllium	6020A	0.017	0.017	0.004	5.0	05/23/16	05/26/16	4.85		
Copper	6020A	0.09	0.09	0.03	5.0	05/23/16	05/26/16	44.1		
Lead	6020A	0.04	0.04	0.02	5.0	05/23/16	05/27/16	25.4		
Nickel	6020A	0.17	0.09	0.03	5.0	05/23/16	05/26/16	26.7		
Zinc	6020A	0.4	0.4	0.2	5.0	05/23/16	05/26/16	119		

% Solids: 98.3

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client:	ARCADIS U.S., Inc.	**Service Request:**	K1605069
Project No.:	06261038.0000	**Date Collected:**	05/12/16
Project Name:	Castner Range Fort Bliss, TX	**Date Received:**	05/14/16
Matrix:	SOIL	**Units:**	mg/Kg
		Basis:	DRY

Sample Name: **FTBL-SED-04-0-6-051216** **Lab Code:** **K1605069-018**

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.042	0.021	0.008	5.0	05/23/16	05/26/16	0.111		J
Arsenic	6020A	0.42	0.08	0.03	5.0	05/23/16	05/26/16	4.43		
Beryllium	6020A	0.017	0.017	0.004	5.0	05/23/16	05/26/16	7.21		
Copper	6020A	0.08	0.08	0.03	5.0	05/23/16	05/26/16	13.0		
Lead	6020A	0.04	0.04	0.02	5.0	05/23/16	05/27/16	17.4		
Nickel	6020A	0.17	0.08	0.03	5.0	05/23/16	05/26/16	10.0		
Zinc	6020A	0.4	0.4	0.2	5.0	05/23/16	05/26/16	67.2		

% Solids: **98.9**

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1605069
Date Collected: 05/12/16
Date Received: 05/14/16
Units: mg/Kg
Basis: DRY

Sample Name: FTBL-SED-05-0-6-051216 **Lab Code:** K1605069-019

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.041	0.020	0.008	5.0	05/23/16	05/26/16	0.188		J
Arsenic	6020A	0.41	0.08	0.03	5.0	05/23/16	05/26/16	6.28		
Beryllium	6020A	0.016	0.016	0.004	5.0	05/23/16	05/26/16	5.64		
Copper	6020A	0.08	0.08	0.03	5.0	05/23/16	05/26/16	60.6		
Lead	6020A	0.04	0.04	0.02	5.0	05/23/16	05/27/16	24.8		
Nickel	6020A	0.16	0.08	0.02	5.0	05/23/16	05/26/16	36.2		
Zinc	6020A	0.4	0.4	0.2	5.0	05/23/16	05/26/16	117		

% Solids: 98.1

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Service Request: K1605069
Project No.: 06261038.0000
Date Collected:
Project Name: Castner Range Fort Bliss, TX
Date Received:
Matrix: SOIL
Units: mg/Kg
Basis: DRY

Sample Name: Method Blank
Lab Code: KQ1605183-01

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.050	0.025	0.010	5.0	05/23/16	05/26/16	0.025	U	J
Arsenic	6020A	0.50	0.10	0.04	5.0	05/23/16	05/26/16	0.10	U	
Beryllium	6020A	0.020	0.020	0.005	5.0	05/23/16	05/26/16	0.020	U	
Copper	6020A	0.10	0.10	0.04	5.0	05/23/16	05/26/16	0.10	U	
Lead	6020A	0.05	0.05	0.02	5.0	05/23/16	05/26/16	0.05	U	
Nickel	6020A	0.20	0.10	0.03	5.0	05/23/16	05/26/16	0.10	U	
Zinc	6020A	0.5	0.5	0.2	5.0	05/23/16	05/26/16	0.5	U	

% Solids: 100.0

Comments:

Metals
- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ARCADIS U.S., Inc. **Service Request:** K1605069

Project No.: 06261038.0000

Project Name: Castner Range Fort Bliss, TX

ICV Source: Inorganic Ventures **CCV Source:** ALS MIXED

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	Method
Antimony	25.0	25.2	101	25.0	25.4	102	24.9	100	6020A
Arsenic	25.0	24.6	98	25.0	25.4	102	24.7	99	6020A
Beryllium	2.5	2.5	100	25.0	24.9	100	25.0	100	6020A
Copper	12.5	12.5	100	25.0	24.9	100	24.2	97	6020A
Lead	25.0	25.5	102	25.0	25.1	100	24.5	98	6020A
Nickel	25.0	24.9	100	25.0	25.3	101	24.0	96	6020A
Zinc	25.0	24.5	98	25.0	24.3	97	24.0	96	6020A

Metals
- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ARCADIS U.S., Inc. **Service Request:** K1605069

Project No.: 06261038.0000

Project Name: Castner Range Fort Bliss, TX

ICV Source: Inorganic Ventures **CCV Source:** ALS MIXED

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	Method
Antimony				25.0	25.5	102	25.3	101	6020A
Arsenic				25.0	25.9	104	25.0	100	6020A
Beryllium				25.0	24.9	100	25.1	100	6020A
Copper				25.0	25.5	102	24.8	99	6020A
Lead				25.0	24.8	99	24.2	97	6020A
Nickel				25.0	25.5	102	24.7	99	6020A
Zinc				25.0	25.9	104	24.8	99	6020A

Metals
- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ARCADIS U.S., Inc. **Service Request:** K1605069

Project No.: 06261038.0000

Project Name: Castner Range Fort Bliss, TX

ICV Source: Inorganic Ventures **CCV Source:** ALS MIXED

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	Method
Antimony				25.0	25.1	100	25.0	100	6020A
Arsenic				25.0	25.0	100	25.3	101	6020A
Beryllium				25.0	25.3	101	25.2	101	6020A
Copper				25.0	24.2	97	25.1	100	6020A
Lead				25.0	23.8	95	23.6	94	6020A
Nickel				25.0	24.3	97	25.2	101	6020A
Zinc				25.0	24.2	97	24.7	99	6020A

Metals
- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ARCADIS U.S., Inc. **Service Request:** K1605069

Project No.: 06261038.0000

Project Name: Castner Range Fort Bliss, TX

ICV Source: Inorganic Ventures **CCV Source:** ALS MIXED

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	Method
Antimony				25.0	25.1	100	24.9	100	6020A
Arsenic				25.0	24.6	98	25.1	100	6020A
Beryllium				25.0	25.3	101	25.2	101	6020A
Copper				25.0	24.3	97	24.3	97	6020A
Lead				25.0	23.2	93	22.7	91	6020A
Nickel				25.0	24.3	97	25.0	100	6020A
Zinc				25.0	24.2	97	24.3	97	6020A

Metals
- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ARCADIS U.S., Inc. **Service Request:** K1605069

Project No.: 06261038.0000

Project Name: Castner Range Fort Bliss, TX

ICV Source: Inorganic Ventures **CCV Source:** ALS MIXED

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	Method
Antimony				25.0	24.8	99	25.0	100	6020A
Arsenic				25.0	25.0	100	25.1	100	6020A
Beryllium				25.0	25.3	101	24.9	100	6020A
Copper				25.0	24.1	96	24.7	99	6020A
Lead				25.0	22.6	90	22.7	91	6020A
Nickel				25.0	24.2	97	25.0	100	6020A
Zinc				25.0	23.8	95	25.3	101	6020A

Metals
- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ARCADIS U.S., Inc. **Service Request:** K1605069

Project No.: 06261038.0000

Project Name: Castner Range Fort Bliss, TX

ICV Source: Inorganic Ventures **CCV Source:** ALS MIXED

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	Method
Antimony				25.0	24.8	99	24.7	99	6020A
Arsenic				25.0	25.2	101	24.6	98	6020A
Beryllium				25.0	25.1	100	25.1	100	6020A
Copper				25.0	24.2	97	24.0	96	6020A
Nickel				25.0	24.3	97	24.0	96	6020A
Zinc				25.0	23.4	94	24.0	96	6020A

Metals
- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ARCADIS U.S., Inc. **Service Request:** K1605069

Project No.: 06261038.0000

Project Name: Castner Range Fort Bliss, TX

ICV Source: Inorganic Ventures **CCV Source:** ALS MIXED

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	Method
Antimony				25.0	25.0	100			6020A
Arsenic				25.0	24.8	99			6020A
Beryllium				25.0	24.9	100			6020A
Copper				25.0	24.2	97			6020A
Nickel				25.0	24.0	96			6020A
Zinc				25.0	23.1	92			6020A

Metals
- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ARCADIS U.S., Inc. **Service Request:** K1605069

Project No.: 06261038.0000

Project Name: Castner Range Fort Bliss, TX

ICV Source: Inorganic Ventures **CCV Source:** ALS MIXED

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	Method
Lead	25.0	24.7	99	25.0	24.9	100	24.3	97	6020A

Metals

- 2a -

LOW LEVEL INITIAL CALIBRATION AND LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Client: ARCADIS U.S., Inc. **SDG No.:** K1605069

Contract: 06261038.0000 **Lab Code:** CASK **Case No.:** **SAS No.:**

Initial Calibration Source: Inorganic Ventures

Continuing Calibration Source: ALS MIXED

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
LLICVS									
	Antimony	0.109	0.100	109	80.0 - 120.0	MS	05/26/16	09:22	052616A
	Arsenic	0.978	1.000	98	80.0 - 120.0	MS	05/26/16	09:22	052616A
	Beryllium	0.037	0.040	92	80.0 - 120.0	MS	05/26/16	09:22	052616A
	Copper	0.221	0.200	110	80.0 - 120.0	MS	05/26/16	09:22	052616A
	Lead	0.098	0.100	98	80.0 - 120.0	MS	05/26/16	09:22	052616A
	Nickel	0.418	0.400	104	80.0 - 120.0	MS	05/26/16	09:22	052616A
	Zinc	0.916	1.000	92	80.0 - 120.0	MS	05/26/16	09:22	052616A
LLCCVS1									
	Antimony	0.120	0.100	120	70.0 - 130.0	MS	05/26/16	11:05	052616A
	Arsenic	0.990	1.000	99	70.0 - 130.0	MS	05/26/16	11:05	052616A
	Beryllium	0.042	0.040	105	70.0 - 130.0	MS	05/26/16	11:05	052616A
	Copper	0.229	0.200	114	70.0 - 130.0	MS	05/26/16	11:05	052616A
	Lead	0.102	0.100	102	70.0 - 130.0	MS	05/26/16	11:05	052616A
	Nickel	0.403	0.400	101	70.0 - 130.0	MS	05/26/16	11:05	052616A
	Zinc	1.079	1.000	108	70.0 - 130.0	MS	05/26/16	11:05	052616A
LLCCVS2									
	Antimony	0.109	0.100	109	70.0 - 130.0	MS	05/26/16	12:39	052616A
	Arsenic	1.065	1.000	106	70.0 - 130.0	MS	05/26/16	12:39	052616A
	Beryllium	0.045	0.040	112	70.0 - 130.0	MS	05/26/16	12:39	052616A
	Copper	0.212	0.200	106	70.0 - 130.0	MS	05/26/16	12:39	052616A
	Lead	0.108	0.100	108	70.0 - 130.0	MS	05/26/16	12:39	052616A
	Nickel	0.358	0.400	90	70.0 - 130.0	MS	05/26/16	12:39	052616A
	Zinc	1.189	1.000	119	70.0 - 130.0	MS	05/26/16	12:39	052616A
LLCCVS3									
	Antimony	0.107	0.100	107	70.0 - 130.0	MS	05/26/16	14:14	052616A
	Arsenic	1.021	1.000	102	70.0 - 130.0	MS	05/26/16	14:14	052616A
	Beryllium	0.051	0.040	128	70.0 - 130.0	MS	05/26/16	14:14	052616A
	Copper	0.223	0.200	112	70.0 - 130.0	MS	05/26/16	14:14	052616A
	Lead	0.104	0.100	104	70.0 - 130.0	MS	05/26/16	14:14	052616A
	Nickel	0.451	0.400	113	70.0 - 130.0	MS	05/26/16	14:14	052616A
	Zinc	1.029	1.000	103	70.0 - 130.0	MS	05/26/16	14:14	052616A

Metals

- 2a -

LOW LEVEL INITIAL CALIBRATION AND LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Client: ARCADIS U.S., Inc. **SDG No.:** K1605069

Contract: 06261038.0000 **Lab Code:** CASK **Case No.:** **SAS No.:**

Initial Calibration Source: Inorganic Ventures

Continuing Calibration Source: ALS MIXED

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
LLCCVS4									
	Antimony	0.114	0.100	114	70.0 - 130.0	MS	05/26/16	14:57	052616A
	Arsenic	1.051	1.000	105	70.0 - 130.0	MS	05/26/16	14:57	052616A
	Beryllium	0.046	0.040	115	70.0 - 130.0	MS	05/26/16	14:57	052616A
	Copper	0.237	0.200	118	70.0 - 130.0	MS	05/26/16	14:57	052616A
	Lead	0.096	0.100	96	70.0 - 130.0	MS	05/26/16	14:57	052616A
	Nickel	0.386	0.400	96	70.0 - 130.0	MS	05/26/16	14:57	052616A
	Zinc	1.132	1.000	113	70.0 - 130.0	MS	05/26/16	14:57	052616A
LLCCVS5									
	Antimony	0.105	0.100	105	70.0 - 130.0	MS	05/26/16	16:45	052616A
	Arsenic	1.024	1.000	102	70.0 - 130.0	MS	05/26/16	16:45	052616A
	Beryllium	0.046	0.040	115	70.0 - 130.0	MS	05/26/16	16:45	052616A
	Copper	0.229	0.200	114	70.0 - 130.0	MS	05/26/16	16:45	052616A
	Lead	0.101	0.100	101	70.0 - 130.0	MS	05/26/16	16:45	052616A
	Nickel	0.425	0.400	106	70.0 - 130.0	MS	05/26/16	16:45	052616A
	Zinc	1.190	1.000	119	70.0 - 130.0	MS	05/26/16	16:45	052616A
LLCCVS6									
	Antimony	0.112	0.100	112	70.0 - 130.0	MS	05/26/16	18:55	052616A
	Arsenic	0.974	1.000	97	70.0 - 130.0	MS	05/26/16	18:55	052616A
	Beryllium	0.043	0.040	108	70.0 - 130.0	MS	05/26/16	18:55	052616A
	Copper	0.217	0.200	108	70.0 - 130.0	MS	05/26/16	18:55	052616A
	Nickel	0.484	0.400	121	70.0 - 130.0	MS	05/26/16	18:55	052616A
	Zinc	1.126	1.000	113	70.0 - 130.0	MS	05/26/16	18:55	052616A
LLICVS									
	Lead	0.099	0.100	99	80.0 - 120.0	MS	05/27/16	08:57	052716A
LLCCVS1									
	Lead	0.100	0.100	100	70.0 - 130.0	MS	05/27/16	09:46	052716A

Metals

- 3 -

BLANKS

Client: ARCADIS U.S., Inc. **Service Request:** K1605069

Project No.: 06261038.0000

Project Name: Castner Range Fort Bliss, TX

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Method
Antimony	0.020	J	0.020	U	0.020	U	0.020	U	6020A
Arsenic	0.08	U	0.08	U	0.08	U	0.08	U	6020A
Beryllium	0.010	U	0.010	U	0.010	U	0.010	U	6020A
Copper	0.08	U	0.08	U	0.08	U	0.08	U	6020A
Lead	0.04	U	0.04	U	0.04	U	0.04	U	6020A
Nickel	0.06	U	0.06	U	0.06	U	0.06	U	6020A
Zinc	0.4	U	0.4	U	0.4	U	0.4	U	6020A

Metals

- 3 -

BLANKS

Client: ARCADIS U.S., Inc. **Service Request:** K1605069

Project No.: 06261038.0000

Project Name: Castner Range Fort Bliss, TX

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Method
Antimony			0.020	U	0.023	J	0.020	U	6020A
Arsenic			0.08	U	0.08	U	0.08	U	6020A
Beryllium			0.010	U	0.012	J	0.010	U	6020A
Copper			0.08	U	0.08	U	0.08	U	6020A
Lead			0.04	U	0.04	U	0.04	U	6020A
Nickel			0.06	U	0.06	U	0.06	U	6020A
Zinc			0.4	U	0.4	U	0.4	U	6020A

Metals

- 3 -

BLANKS

Client: ARCADIS U.S., Inc. **Service Request:** K1605069

Project No.: 06261038.0000

Project Name: Castner Range Fort Bliss, TX

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Method
Antimony			0.023	J	0.020	U	0.021	J	6020A
Arsenic			0.08	U	0.08	U	0.08	U	6020A
Beryllium			0.010	U	0.010	U	0.010	U	6020A
Copper			0.08	U	0.08	U	0.08	U	6020A
Lead			0.04	U	0.04	U	0.04	U	6020A
Nickel			0.06	U	0.06	U	0.06	U	6020A
Zinc			0.4	U	0.4	U	0.4	U	6020A

Metals

- 3 -

BLANKS

Client: ARCADIS U.S., Inc. **Service Request:** K1605069

Project No.: 06261038.0000

Project Name: Castner Range Fort Bliss, TX

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Method
Antimony			0.020	U	0.020	U	0.020	U	6020A
Arsenic			0.08	U	0.08	U	0.08	U	6020A
Beryllium			0.010	U	0.010	U	0.010	U	6020A
Copper			0.08	U	0.08	U	0.08	U	6020A
Lead			0.04	U					6020A
Nickel			0.06	U	0.06	U	0.06	U	6020A
Zinc			0.4	U	0.4	U	0.4	U	6020A

Metals

- 3 -

BLANKS

Client: ARCADIS U.S., Inc. **Service Request:** K1605069

Project No.: 06261038.0000

Project Name: Castner Range Fort Bliss, TX

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Method
Antimony			0.020	U					6020A
Arsenic			0.08	U					6020A
Beryllium			0.010	U					6020A
Copper			0.08	U					6020A
Nickel			0.06	U					6020A
Zinc			0.4	U					6020A

Metals

- 3 -

BLANKS

Client: ARCADIS U.S., Inc. **Service Request:** K1605069

Project No.: 06261038.0000

Project Name: Castner Range Fort Bliss, TX

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Method
Lead	0.04	U	0.04	U	0.04	U			6020A

Metals

- 4 -

ICP INTERFERENCE CHECK SAMPLE

Client: ARCADIS U.S., Inc. **Service Request:** K1605069

Project No.: 06261038.0000

Project Name: Castner Range Fort Bliss, TX

ICP ID Number: Agilent ICPMS **ICS Source:** Inorganic Ventures

Concentration Units): ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Antimony	0.0		0.0	0.0				
Arsenic	0.0	25.0	0.1	23.0	92			
Beryllium	0.0		0.0	0.0				
Copper	0.0	50.0	0.6	45.2	90			
Lead	0.0		0.1	0.1				
Nickel	0.0	50.0	0.5	45.1	90			
Zinc	0.0	25.0	0.3	22.4	90			

Metals

- 4 -

ICP INTERFERENCE CHECK SAMPLE

Client: ARCADIS U.S., Inc. **Service Request:** K1605069

Project No.: 06261038.0000

Project Name: Castner Range Fort Bliss, TX

ICP ID Number: Agilent ICPMS **ICS Source:** Inorganic Ventures

Concentration Units): ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Lead	0.0		0.1	0.1				

Metals
- 5A -
SPIKE SAMPLE RECOVERY

Client: ARCADIS U.S., Inc. **Service Request:** K1605069

Project No.: 06261038.0000 **Units:** MG/KG

Project Name: Castner Range Fort Bliss, TX **Basis:** DRY

Matrix: SOIL **% Solids:** 99.6

Sample Name: FTBL-SED-25-0-6-051016S **Lab Code:** K1605069-001S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Antimony	72 - 124	67.657		0.070		98.4	69	J	6020A
Arsenic	82 - 118	103.26		3.09		98.4	102		6020A
Beryllium	80 - 120	11.937		0.943		9.8	112		6020A
Copper	84 - 119	71.61		18.52		49.2	108		6020A
Lead	84 - 118	104.60		10.41		98.4	96		6020A
Nickel	84 - 119	129.55		26.27		98.4	105		6020A
Zinc	82 - 119	182.7		72.2		98.4	112		6020A

An empty field in the Control Limit column indicates the control limit is not applicabl

Metals
- 5A -
SPIKE SAMPLE RECOVERY

Client: ARCADIS U.S., Inc. **Service Request:** K1605069

Project No.: 06261038.0000 **Units:** MG/KG

Project Name: Castner Range Fort Bliss, TX **Basis:** DRY

Matrix: SOIL **% Solids:** 99.6

Sample Name: FTBL-SED-25-0-6-051016SD **Lab Code:** K1605069-001SD

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Antimony	72 - 124	58.222		0.070		92.1	63	J	6020A
Arsenic	82 - 118	90.44		3.09		92.1	95		6020A
Beryllium	80 - 120	10.397		0.943		9.2	103		6020A
Copper	84 - 119	63.01		18.52		46.1	97		6020A
Lead	84 - 118	98.39		10.41		92.1	96		6020A
Nickel	84 - 119	119.13		26.27		92.1	101		6020A
Zinc	82 - 119	161.8		72.2		92.1	97		6020A

An empty field in the Control Limit column indicates the control limit is not applicabl

Metals
- 5B -
POST SPIKE SAMPLE RECOVERY

Client: ARCADIS U.S., Inc. **Service Request:** K1605069

Project No.: 06261038.0000 **Units:** UG/L

Project Name: Castner Range Fort Bliss, TX **Basis:** DRY

Matrix: WATER

Sample Name: FTBL-SED-25-0-6-051016A **Lab Code:** K1605069-001A

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Antimony	75 - 125	48.401		0.139		50.0	97		6020A
Arsenic	75 - 125	55.08		6.16		50.0	98		6020A
Beryllium	75 - 125	51.773		1.879		50.0	100		6020A
Copper	75 - 125	84.07		36.90		50.0	94		6020A
Lead	75 - 125	64.10		20.73		50.0	87		6020A
Nickel	75 - 125	101.44		52.33		50.0	98		6020A
Zinc	75 - 125	190.5		143.9		50.0	93		6020A

Metals

- 6 -

DUPLICATES

Client: ARCADIS U.S., Inc. **Service Request:** K1605069

Project No.: 06261038.0000 **Units:** MG/KG

Project Name: Castner Range Fort Bliss, TX **Basis:** DRY

Matrix: SOIL **% Solids:** 99.6

Sample Name: **FTBL-SED-25-0-6-051016SD** **Lab Code:** **K1605069-001SD**

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Antimony	20	67.657		58.222		15.0		6020A
Arsenic	20	103.26		90.44		13.2		6020A
Beryllium	20	11.937		10.397		13.8		6020A
Copper	20	71.61		63.01		12.8		6020A
Lead	20	104.60		98.39		6.1		6020A
Nickel	20	129.55		119.13		8.4		6020A
Zinc	20	182.7		161.8		12.1		6020A

An empty field in the Control Limit column indicates the control limit is not applicable

Form VI - IN

Metals

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LABORATORY CONTROL SAMPLE

Client: ARCADIS U.S., Inc. **Service Request:** K1605069

Project No.: 06261038.0000

Project Name: Castner Range Fort Bliss, TX

Aqueous LCS Source: **ALS MIXED** **Solid LCS Source:**

Analyte	Aqueous (ug/L)			Solid (mg/kg)				
	True	Found	%R	True	Found	C	Limits	%R
Antimony	1000.0	1010.0	101					
Arsenic	1000.0	1050.0	105					
Beryllium	100.00	101.00	101					
Copper	500.0	519.0	104					
Lead	1000.0	916.0	92					
Nickel	1000.0	1030.0	103					
Zinc	1000.0	1050.0	105					

Metals

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ICP SERIAL DILUTIONS

Client: ARCADIS U.S., Inc. **Service Request:** K1605069

Project No.: 06261038.0000 **Units:** UG/L

Project Name: Castner Range Fort Bliss, TX

Sample Name: **FTBL-SED-25-0-6-051016L** **Lab Code:** **K1605069-001L**

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Antimony	0.139		0.115	J	17.3		MS
Arsenic	6.16		6.33		2.8		MS
Beryllium	1.880		1.950		3.7		MS
Copper	36.90		36.80		0.3		MS
Lead	20.70		21.20		2.4		MS
Nickel	52.30		52.70		0.8		MS
Zinc	144.0		145.0		0.7		MS

Metals

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DETECTION LIMITS

Client: ARCADIS U.S., Inc. **Service Request:** K1605069

Project No.: 06261038.0000

Project Name: Castner Range Fort Bliss, TX

ICP/ICP-MS ID #: **Agilent ICPMS**

GFAA ID #: **AA ID #:**

Analyte	Isotope	Back-ground	LOQ ug/L	MDL ug/L	M
Antimony	123		0.100	0.020	MS
Arsenic	75		1.00	0.08	MS
Beryllium	9		0.040	0.010	MS
Copper	65		0.20	0.08	MS
Lead	208		0.10	0.04	MS
Nickel	60		0.40	0.06	MS
Zinc	66		1.0	0.4	MS

Comments:

Metals

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ICP LINEAR RANGES (QUARTERLY)

Client: ARCADIS U.S., Inc. **Service Request:** K1605069

Project No.: 06261038.0000

Project Name: Castner Range Fort Bliss, TX

ICP ID Number: **Agilent ICPMS**

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Antimony	0.300	2700	6020A
Arsenic	1.000	2700	6020A
Beryllium	1.000	2700	6020A
Copper	0.300	2700	6020A
Lead	0.300	2700	6020A
Nickel	0.300	2700	6020A
Zinc	0.300	2700	6020A

Comments:

Metals
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PREPARATION LOG

Client: ARCADIS U.S., Inc. **Service Request:** K1605069

Project No.: 06261038.0000

Project Name: Castner Range Fort Bliss, TX

Method: MS

Sample ID	Preparation Date	Initial Weight (g)	Final Volume(mL)
K1605069-001	05/23/16	1.00	100.0
K1605069-001S	05/23/16	1.02	100.0
K1605069-001SD	05/23/16	1.09	100.0
K1605069-002	05/23/16	1.17	100.0
K1605069-003	05/23/16	1.25	100.0
K1605069-004	05/23/16	1.13	100.0
K1605069-005	05/23/16	1.26	100.0
K1605069-006	05/23/16	1.30	100.0
K1605069-007	05/23/16	1.29	100.0
K1605069-008	05/23/16	1.25	100.0
K1605069-009	05/23/16	1.32	100.0
K1605069-010	05/23/16	1.26	100.0
K1605069-011	05/23/16	1.27	100.0
K1605069-012	05/23/16	1.38	100.0
K1605069-013	05/23/16	1.42	100.0
K1605069-014	05/23/16	1.28	100.0
K1605069-015	05/23/16	1.24	100.0
K1605069-016	05/23/16	1.26	100.0
K1605069-017	05/23/16	1.18	100.0
K1605069-018	05/23/16	1.21	100.0
K1605069-019	05/23/16	1.25	100.0
KQ1605183-01	05/23/16	1.00	100.0
KQ1605183-02	05/23/16	100.0	100.0

Metals

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ANALYSIS RUN LOG

Client: ARCADIS U.S., Inc. **Service Request:** K1605069

Project No.: 06261038.0000 **Run Number:** 052616A

Project Name: Castner Range Fort Bliss, TX

Instrument ID Number: Agilent ICPMS **Method:** MS

Start Date: 05/26/16 **End Date:** 05/26/16

Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
Blank	1.0	08:57			X	X							X		X				X							X	
25ppb	1.0	09:02			X	X							X		X				X							X	
ICV	1.0	09:06			X	X							X		X				X							X	
CCV1	1.0	09:10			X	X							X		X				X							X	
ICB1	1.0	09:14			X	X							X		X				X							X	
CCB1	1.0	09:18			X	X							X		X				X							X	
LLICVS	1.0	09:22			X	X							X		X				X							X	
ICS-A1	1.0	09:26			X	X							X		X				X							X	
ICS-AB1	1.0	09:29			X	X							X		X				X							X	
ZZZZZZ	5.0	09:33																									
ZZZZZZ	20.0	09:37																									
ZZZZZZ	5.0	09:41																									
ZZZZZZ	5.0	09:45																									
ZZZZZZ	1.0	09:49																									
ZZZZZZ	5.0	09:52																									
ZZZZZZ	5.0	09:56																									
ZZZZZZ	5.0	10:00																									
ZZZZZZ	5.0	10:04																									
ZZZZZZ	5.0	10:08																									
CCV2	1.0	10:11			X	X							X		X				X							X	
CCB2	1.0	10:15			X	X							X		X				X							X	
ZZZZZZ	5.0	10:19																									
ZZZZZZ	5.0	10:23																									
ZZZZZZ	5.0	10:27																									
ZZZZZZ	5.0	10:31																									
ZZZZZZ	5.0	10:34																									
ZZZZZZ	5.0	10:38																									
ZZZZZZ	5.0	10:42																									
ZZZZZZ	5.0	10:46																									
ZZZZZZ	5.0	10:50																									
ZZZZZZ	5.0	10:54																									
CCV3	1.0	10:57			X	X							X		X				X							X	

*** - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14**

Metals

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ANALYSIS RUN LOG

Client: ARCADIS U.S., Inc. **Service Request:** K1605069

Project No.: 06261038.0000 **Run Number:** 052616A

Project Name: Castner Range Fort Bliss, TX

Instrument ID Number: Agilent ICPMS **Method:** MS

Start Date: 05/26/16 **End Date:** 05/26/16

Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CCB3	1.0	11:01			X	X							X		X				X							X	
LLCCVS1	1.0	11:05			X	X							X		X				X							X	
ZZZZZZ	5.0	11:09																									
ZZZZZZ	5.0	11:13																									
ZZZZZZ	5.0	11:17																									
ZZZZZZ	5.0	11:20																									
ZZZZZZ	5.0	11:24																									
ZZZZZZ	5.0	11:28																									
ZZZZZZ	5.0	11:32																									
ZZZZZZ	20.0	11:36																									
ZZZZZZ	5.0	11:40																									
ZZZZZZ	5.0	11:43																									
CCV4	1.0	11:47			X	X							X		X				X							X	
CCB4	1.0	11:52			X	X							X		X				X							X	
ZZZZZZ	1.0	11:57																									
ZZZZZZ	1.0	12:00																									
ZZZZZZ	5.0	12:04																									
ZZZZZZ	5.0	12:08																									
ZZZZZZ	5.0	12:12																									
ZZZZZZ	5.0	12:16																									
ZZZZZZ	5.0	12:20																									
ZZZZZZ	5.0	12:23																									
ZZZZZZ	5.0	12:27																									
CCV5	1.0	12:31			X	X							X		X				X							X	
CCB5	1.0	12:35			X	X							X		X				X							X	
LLCCVS2	1.0	12:39			X	X							X		X				X							X	
ZZZZZZ	5.0	12:42																									
ZZZZZZ	20.0	12:46																									
ZZZZZZ	5.0	12:50																									
ZZZZZZ	5.0	12:54																									
ZZZZZZ	1.0	12:58																									
ZZZZZZ	5.0	13:02																									

*** - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14**

Metals

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ANALYSIS RUN LOG

Client: ARCADIS U.S., Inc. **Service Request:** K1605069

Project No.: 06261038.0000 **Run Number:** 052616A

Project Name: Castner Range Fort Bliss, TX

Instrument ID Number: Agilent ICPMS **Method:** MS

Start Date: 05/26/16 **End Date:** 05/26/16

Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	5.0	13:06																										
ZZZZZZ	5.0	13:09																										
ZZZZZZ	5.0	13:13																										
ZZZZZZ	5.0	13:17																										
CCV6	1.0	13:21			X	X							X		X				X							X		
CCB6	1.0	13:25			X	X							X		X				X							X		
ZZZZZZ	5.0	13:28																										
ZZZZZZ	5.0	13:32																										
ZZZZZZ	5.0	13:36																										
ZZZZZZ	5.0	13:40																										
ZZZZZZ	5.0	13:44																										
ZZZZZZ	5.0	13:48																										
ZZZZZZ	5.0	13:51																										
ZZZZZZ	5.0	13:55																										
ZZZZZZ	5.0	13:59																										
ZZZZZZ	5.0	14:03																										
CCV7	1.0	14:07			X	X							X		X				X							X		
CCB7	1.0	14:11			X	X							X		X				X							X		
LLCCVS3	1.0	14:14			X	X							X		X				X							X		
ZZZZZZ	1.0	14:18																										
ZZZZZZ	1.0	14:22																										
ZZZZZZ	5.0	14:26																										
ZZZZZZ	5.0	14:30																										
ZZZZZZ	5.0	14:34																										
ZZZZZZ	5.0	14:37																										
ZZZZZZ	5.0	14:41																										
ZZZZZZ	5.0	14:45																										
CCV8	1.0	14:49			X	X							X		X				X							X		
CCB8	1.0	14:53			X	X							X		X				X							X		
LLCCVS4	1.0	14:57			X	X							X		X				X							X		
ZZZZZZ	1.0	15:00																										
ZZZZZZ	1.0	15:04																										

*** - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14**

Metals
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ANALYSIS RUN LOG

Client: ARCADIS U.S., Inc. **Service Request:** K1605069

Project No.: 06261038.0000 **Run Number:** 052616A

Project Name: Castner Range Fort Bliss, TX

Instrument ID Number: Agilent ICPMS **Method:** MS

Start Date: 05/26/16 **End Date:** 05/26/16

Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
KQ1605183-01	5.0	15:08			X	X							X		X				X							X	
KQ1605183-02	20.0	15:12			X	X							X		X				X							X	
K1605069-001	5.0	15:16			X	X							X		X				X							X	
K1605069-001L	5.0	15:20			X	X							X		X				X							X	
K1605069-001A	1.0	15:23			X	X							X		X				X							X	
K1605069-001S	5.0	15:27			X	X							X		X				X							X	
K1605069-001SD	5.0	15:31			X	X							X		X				X							X	
K1605069-002	5.0	15:35			X	X							X		X				X							X	
K1605069-003	5.0	15:39			X	X							X		X				X							X	
K1605069-004	5.0	15:43			X	X							X		X				X							X	
CCV9	1.0	15:46			X	X							X		X				X							X	
CCB9	1.0	15:50			X	X							X		X				X							X	
K1605069-005	5.0	15:54			X	X							X		X				X							X	
ZZZZZZ	1.0	15:58																									
K1605069-006	5.0	16:02			X	X							X		X				X							X	
K1605069-007	5.0	16:05			X	X							X		X				X							X	
K1605069-008	5.0	16:09			X	X							X		X				X							X	
K1605069-009	5.0	16:13			X	X							X		X				X							X	
K1605069-010	5.0	16:17			X	X							X		X				X							X	
K1605069-011	5.0	16:21			X	X							X		X				X							X	
K1605069-012	5.0	16:25			X	X							X		X				X							X	
LRSTD	1.0	16:28			X	X							X		X				X							X	
CCV10	1.0	16:33			X	X							X		X				X							X	
CCB10	1.0	16:37			X	X							X		X				X							X	
ZZZZZZ	1.0	16:41																									
LLCCVS5	1.0	16:45			X	X							X		X				X							X	
K1605069-013	5.0	16:52			X	X							X						X							X	
K1605069-014	5.0	16:56			X	X							X						X							X	
K1605069-015	5.0	17:00			X	X							X						X							X	
K1605069-016	5.0	17:04			X	X							X						X							X	
K1605069-017	5.0	17:08			X	X							X						X							X	
K1605069-018	5.0	17:11			X	X							X						X							X	

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Metals

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ANALYSIS RUN LOG

Client: ARCADIS U.S., Inc. **Service Request:** K1605069

Project No.: 06261038.0000 **Run Number:** 052616A

Project Name: Castner Range Fort Bliss, TX

Instrument ID Number: Agilent ICPMS **Method:** MS

Start Date: 05/26/16 **End Date:** 05/26/16

Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
K1605069-019	5.0	17:15			X	X							X						X							X	
ZZZZZZ	5.0	17:19																									
ZZZZZZ	20.0	17:23																									
ZZZZZZ	1.0	17:27																									
CCV11	1.0	17:31			X	X							X						X							X	
ZZZZZZ	1.0	17:34																									
ZZZZZZ	1.0	17:38																									
CCB11	1.0	17:42			X	X							X						X							X	
ZZZZZZ	1.0	17:46																									
ZZZZZZ	5.0	17:50																									
ZZZZZZ	1.0	17:54																									
ZZZZZZ	1.0	17:57																									
ZZZZZZ	1.0	18:01																									
ZZZZZZ	1.0	18:05																									
ZZZZZZ	1.0	18:09																									
ZZZZZZ	1.0	18:13																									
ZZZZZZ	1.0	18:17																									
ZZZZZZ	1.0	18:20																									
CCV12	1.0	18:24			X	X							X						X							X	
CCB12	1.0	18:28			X	X							X						X							X	
ZZZZZZ	1.0	18:32																									
ZZZZZZ	1.0	18:36																									
ZZZZZZ	1.0	18:39																									
ZZZZZZ	1.0	18:43																									
CCV13	1.0	18:47			X	X							X						X							X	
CCB13	1.0	18:51			X	X							X						X							X	
LLCCVS6	1.0	18:55			X	X							X						X							X	
ZZZZZZ	1.0	18:59																									
ZZZZZZ	1.0	19:02																									

*** - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14**

Metals

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ANALYSIS RUN LOG

Client: ARCADIS U.S., Inc. **Service Request:** K1605069

Project No.: 06261038.0000 **Run Number:** 052716A

Project Name: Castner Range Fort Bliss, TX

Instrument ID Number: Agilent ICPMS **Method:** MS

Start Date: 05/27/16 **End Date:** 05/27/16

Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN			
Blank	1.0	08:37													X															
25ppb	1.0	08:40													X															
ICV2	1.0	08:44													X															
CCV1	1.0	08:47													X															
ICB2	1.0	08:51													X															
CCB1	1.0	08:54													X															
LLICVS	1.0	08:57													X															
LRSTD	1.0	09:00													X															
ICS-A1	1.0	09:03													X															
ICS-AB1	1.0	09:06													X															
K1605069-013	5.0	09:09													X															
K1605069-014	5.0	09:12													X															
K1605069-015	5.0	09:16													X															
K1605069-016	5.0	09:19													X															
K1605069-017	5.0	09:22													X															
K1605069-018	5.0	09:25													X															
K1605069-019	5.0	09:28													X															
ZZZZZZ	5.0	09:31																												
ZZZZZZ	5.0	09:34																												
ZZZZZZ	1.0	09:37																												
CCV2	1.0	09:40													X															
CCB2	1.0	09:43													X															
LLCCVS1	1.0	09:46													X															

*** - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14**

Metals

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ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: ALS Group USA, Corp. Contract: 06261038.0000

Lab Code: CASK Case No.: NRAS No.: SDG NO.: K1605069

ICP-MS Instrument ID: Agilent ICPMS Start Date: 05/26/2016 End Date: 05/26/2016

Sample No.	Client ID	Time	Internal Standards %RI For:											
			Element Li 6_NG	Q	Element Ge 72_He	Q	Element In115_He	Q	Element Lu175_He	Q	Element	Q	Element	Q
Blank	Blank	0857	100		100		100		100					
25ppb	25ppb	0902	99		106		107		107					
ICV	ICV	0906	99		106		106		106					
CCV1	CCV	0910	99		105		106		107					
ICB1	ICB	0914	95		102		106		105					
CCB1	CCB	0918	100		106		106		106					
LLICVS	LLICVS	0922	99		107		107		107					
ICS-A1	ICSA	0926	91		103		100		104					
ICS-AB1	ICSAB	0929	93		105		102		105					
ZZZZZZ	ZZZZZZ	0933												
ZZZZZZ	ZZZZZZ	0937												
ZZZZZZ	ZZZZZZ	0941												
ZZZZZZ	ZZZZZZ	0945												
ZZZZZZ	ZZZZZZ	0949												
ZZZZZZ	ZZZZZZ	0952												
ZZZZZZ	ZZZZZZ	0956												
ZZZZZZ	ZZZZZZ	1000												
ZZZZZZ	ZZZZZZ	1004												
ZZZZZZ	ZZZZZZ	1008												
CCV2	CCV	1011	96		107		105		106					
CCB2	CCB	1015	98		108		110		109					
ZZZZZZ	ZZZZZZ	1019												
ZZZZZZ	ZZZZZZ	1023												
ZZZZZZ	ZZZZZZ	1027												
ZZZZZZ	ZZZZZZ	1031												
ZZZZZZ	ZZZZZZ	1034												
ZZZZZZ	ZZZZZZ	1038												
ZZZZZZ	ZZZZZZ	1042												
ZZZZZZ	ZZZZZZ	1046												
ZZZZZZ	ZZZZZZ	1050												
ZZZZZZ	ZZZZZZ	1054												
CCV3	CCV	1057	96		109		111		111					
CCB3	CCB	1101	99		109		112		112					
LLCCVS1	LLCCVS1	1105	98		108		110		110					
ZZZZZZ	ZZZZZZ	1109												
ZZZZZZ	ZZZZZZ	1113												
ZZZZZZ	ZZZZZZ	1117												
ZZZZZZ	ZZZZZZ	1120												
ZZZZZZ	ZZZZZZ	1124												
ZZZZZZ	ZZZZZZ	1128												
ZZZZZZ	ZZZZZZ	1132												
ZZZZZZ	ZZZZZZ	1136												
ZZZZZZ	ZZZZZZ	1140												
ZZZZZZ	ZZZZZZ	1143												

Metals

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ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: ALS Group USA, Corp. Contract: 06261038.0000

Lab Code: CASK Case No.: NRAS No.: SDG NO.: K1605069

ICP-MS Instrument ID: Agilent ICPMS Start Date: 05/26/2016 End Date: 05/26/2016

Sample No.	Client ID	Time	Internal Standards %RI For:											
			Element Li 6_NG	Q	Element Ge 72_He	Q	Element In115_He	Q	Element Lu175_He	Q	Element	Q	Element	Q
CCV4	CCV	1147	99		110		110		111					
CCB4	CCB	1152	99		110		110		112					
ZZZZZZ	ZZZZZZ	1157												
ZZZZZZ	ZZZZZZ	1200												
ZZZZZZ	ZZZZZZ	1204												
ZZZZZZ	ZZZZZZ	1208												
ZZZZZZ	ZZZZZZ	1212												
ZZZZZZ	ZZZZZZ	1216												
ZZZZZZ	ZZZZZZ	1220												
ZZZZZZ	ZZZZZZ	1223												
ZZZZZZ	ZZZZZZ	1227												
CCV5	CCV	1231	100		113		111		113					
CCB5	CCB	1235	100		111		113		113					
LLCCVS2	LLCCVS2	1239	99		111		112		111					
ZZZZZZ	ZZZZZZ	1242												
ZZZZZZ	ZZZZZZ	1246												
ZZZZZZ	ZZZZZZ	1250												
ZZZZZZ	ZZZZZZ	1254												
ZZZZZZ	ZZZZZZ	1258												
ZZZZZZ	ZZZZZZ	1302												
ZZZZZZ	ZZZZZZ	1306												
ZZZZZZ	ZZZZZZ	1309												
ZZZZZZ	ZZZZZZ	1313												
ZZZZZZ	ZZZZZZ	1317												
CCV6	CCV	1321	99		111		111		114					
CCB6	CCB	1325	96		108		110		113					
ZZZZZZ	ZZZZZZ	1328												
ZZZZZZ	ZZZZZZ	1332												
ZZZZZZ	ZZZZZZ	1336												
ZZZZZZ	ZZZZZZ	1340												
ZZZZZZ	ZZZZZZ	1344												
ZZZZZZ	ZZZZZZ	1348												
ZZZZZZ	ZZZZZZ	1351												
ZZZZZZ	ZZZZZZ	1355												
ZZZZZZ	ZZZZZZ	1359												
ZZZZZZ	ZZZZZZ	1403												
CCV7	CCV	1407	100		114		112		114					
CCB7	CCB	1411	102		113		112		115					
LLCCVS3	LLCCVS3	1414	101		112		112		114					
ZZZZZZ	ZZZZZZ	1418												
ZZZZZZ	ZZZZZZ	1422												
ZZZZZZ	ZZZZZZ	1426												
ZZZZZZ	ZZZZZZ	1430												
ZZZZZZ	ZZZZZZ	1434												

Metals

15-IN

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: ALS Group USA, Corp. Contract: 06261038.0000

Lab Code: CASK Case No.: NRAS No.: SDG NO.: K1605069

ICP-MS Instrument ID: Agilent ICPMS Start Date: 05/26/2016 End Date: 05/26/2016

Sample No.	Client ID	Time	Internal Standards %RI For:											
			Element Li 6_NG	Q	Element Ge 72_He	Q	Element In115_He	Q	Element Lu175_He	Q	Element	Q	Element	Q
ZZZZZZ	ZZZZZZ	1437												
ZZZZZZ	ZZZZZZ	1441												
ZZZZZZ	ZZZZZZ	1445												
CCV8	CCV	1449	100		112		112		115					
CCB8	CCB	1453	99		111		111		114					
LLCCVS4	LLCCVS4	1457	99		111		110		114					
ZZZZZZ	ZZZZZZ	1500												
ZZZZZZ	ZZZZZZ	1504												
KQ1605183-01	Method Blank	1508	103		112		113		115					
KQ1605183-02	Lab Control	1512	107		114		117		119					
K1605069-001	FTBL-SED-25-0-6-	1516	104		115		115		118					
K1605069-001L	FTBL-SED-25-0-6-	1520	101		116		112		116					
K1605069-001A	FTBL-SED-25-0-6-	1523	104		115		115		120					
K1605069-001S	FTBL-SED-25-0-6-	1527	101		114		113		118					
K1605069-001SD	FTBL-SED-25-0-6-	1531	101		114		112		118					
K1605069-002	FTBL-SED-11-0-6-	1535	101		113		113		117					
K1605069-003	FTBL-SED-12-0-6-	1539	98		110		109		115					
K1605069-004	FD051016	1543	98		113		111		117					
CCV9	CCV	1546	97		112		109		114					
CCB9	CCB	1550	98		112		110		114					
K1605069-005	FTBL-SED-13-0-6-	1554	97		108		108		115					
ZZZZZZ	ZZZZZZ	1558												
K1605069-006	FTBL-SED-20-0-6-	1602	96		108		107		117					
K1605069-007	FTBL-SED-20-12-1	1605	96		109		108		115					
K1605069-008	FTBL-SED-19-0-6-	1609	96		110		107		117					
K1605069-009	FTBL-SED-19-12-1	1613	95		108		107		113					
K1605069-010	FTBL-SED-18-0-6-	1617	94		109		106		114					
K1605069-011	FTBL-SED-17-0-6-	1621	100		112		111		118					
K1605069-012	FTBL-SED-16-0-6-	1625	99		112		110		117					
LRSTD	LRSTD	1628	96		108		108		112					
CCV10	CCV	1633	96		107		107		113					
CCB10	CCB	1637	91		96		94		99					
ZZZZZZ	ZZZZZZ	1641												
LLCCVS5	LLCCVS5	1645	97		109		107		113					
K1605069-013	FTBL-SED-52-0-6-	1652	94		105		104							
K1605069-014	FTBL-SED-01-0-6-	1656	98		112		109							
K1605069-015	FTBL-SED-02-0-6-	1700	98		114		109							
K1605069-016	FD051216	1704	99		114		110							
K1605069-017	FTBL-SED-03-0-6-	1708	97		115		110							
K1605069-018	FTBL-SED-04-0-6-	1711	101		118		113							
K1605069-019	FTBL-SED-05-0-6-	1715	97		113		109							
ZZZZZZ	ZZZZZZ	1719												
ZZZZZZ	ZZZZZZ	1723												
ZZZZZZ	ZZZZZZ	1727												

Metals

15-IN

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: ALS Group USA, Corp. Contract: 06261038.0000

Lab Code: CASK Case No.: NRAS No.: SDG NO.: K1605069

ICP-MS Instrument ID: Agilent ICPMS Start Date: 05/26/2016 End Date: 05/26/2016

Sample No.	Client ID	Time	Internal Standards %RI For:											
			Element Li 6_NG	Q	Element Ge 72_He	Q	Element In115_He	Q	Element Lu175_He	Q	Element	Q	Element	Q
CCV11	CCV	1731	97		110		108							
ZZZZZZ	ZZZZZZ	1734												
ZZZZZZ	ZZZZZZ	1738												
CCB11	CCB	1742	98		108		108							
ZZZZZZ	ZZZZZZ	1746												
ZZZZZZ	ZZZZZZ	1750												
ZZZZZZ	ZZZZZZ	1754												
ZZZZZZ	ZZZZZZ	1757												
ZZZZZZ	ZZZZZZ	1801												
ZZZZZZ	ZZZZZZ	1805												
ZZZZZZ	ZZZZZZ	1809												
ZZZZZZ	ZZZZZZ	1813												
ZZZZZZ	ZZZZZZ	1817												
ZZZZZZ	ZZZZZZ	1820												
CCV12	CCV	1824	99		113		110							
CCB12	CCB	1828	97		106		105							
ZZZZZZ	ZZZZZZ	1832												
ZZZZZZ	ZZZZZZ	1836												
ZZZZZZ	ZZZZZZ	1839												
ZZZZZZ	ZZZZZZ	1843												
CCV13	CCV	1847	96		109		108							
CCB13	CCB	1851	92		103		103							
LLCCVS6	LLCCVS6	1855	96		107		106							
ZZZZZZ	ZZZZZZ	1859												
ZZZZZZ	ZZZZZZ	1902												

Metals

15-IN

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: ALS Group USA, Corp. Contract: 06261038.0000

Lab Code: CASK Case No.: _____ NRAS No.: _____ SDG NO.: K1605069

ICP-MS Instrument ID: Agilent ICPMS Start Date: 05/27/2016 End Date: 05/27/2016

Sample No.	Client ID	Time	Internal Standards %RI For:											
			Element Lu175_He	Q	Element	Q	Element	Q	Element	Q	Element	Q	Element	Q
Blank	Blank	0837	100											
25ppb	25ppb	0840	90											
ICV2	ICV	0844	102											
CCV1	CCV	0847	101											
ICB2	ICB	0851	101											
CCB1	CCB	0854	86											
LLICVS	LLICVS	0857	100											
LRSTD	LRSTD	0900	98											
ICS-A1	ICSA	0903	98											
ICS-AB1	ICSAB	0906	100											
K1605069-013	FTBL-SED-52-0-6-...	0909	104											
K1605069-014	FTBL-SED-01-0-6-...	0912	108											
K1605069-015	FTBL-SED-02-0-6-...	0916	105											
K1605069-016	FD051216	0919	106											
K1605069-017	FTBL-SED-03-0-6-...	0922	108											
K1605069-018	FTBL-SED-04-0-6-...	0925	111											
K1605069-019	FTBL-SED-05-0-6-...	0928	107											
ZZZZZZ	ZZZZZZ	0931												
ZZZZZZ	ZZZZZZ	0934												
ZZZZZZ	ZZZZZZ	0937												
CCV2	CCV	0940	104											
CCB2	CCB	0943	103											
LLCCVS1	LLCCVS1	0946	104											

Raw Data

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Total Solids

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Benchsheet

Service Request #: K1605069, KQ1605651 **Run #:** 498808
Test: TS **Balance ID:** K-Balance-16
Method: 160.3 Modified

Pan ID:	Lab Code:	Tare (g)	Wet Wt. (g)	Tare + Dry Wt. (g)	Dry Weight (g)	% Total Solids	RPD
	K1605069-001	1.28	10.49	11.73	10.5	99.6	
	K1605069-001DUP	1.30	10.06	11.33	10.0	99.7	<1
	K1605069-002	1.26	10.60	11.85	10.6	99.9	
	K1605069-003	1.27	10.22	11.44	10.2	99.5	
	K1605069-004	1.28	10.24	11.48	10.2	99.6	
	K1605069-005	1.27	10.27	11.51	10.2	99.7	
	K1605069-006	1.27	10.17	11.32	10.1	98.8	
	K1605069-007	1.27	10.78	11.83	10.6	98.0	
	K1605069-008	1.26	10.20	11.41	10.2	99.5	
	K1605069-009	1.27	10.80	11.96	10.7	99.0	
	K1605069-010	1.25	10.05	11.24	9.99	99.4	
	K1605069-011	1.29	10.25	11.51	10.2	99.7	
	K1605069-011DUP	1.27	10.22	11.46	10.2	99.7	<1
	K1605069-012	1.27	10.47	11.70	10.4	99.6	
	K1605069-013	1.26	10.01	11.24	9.98	99.7	
	K1605069-014	1.26	10.41	11.62	10.4	99.5	
	K1605069-015	1.27	10.12	11.26	9.99	98.7	
	K1605069-016	1.27	10.33	11.47	10.2	98.7	
	K1605069-017	1.26	10.37	11.45	10.2	98.3	
	K1605069-018	1.26	10.08	11.23	9.97	98.9	
	K1605069-019	1.28	10.47	11.55	10.3	98.1	

	Oven ID	Temp In	Temp Out	Date In	Time In	Date Out	Time Out	Thermometer ID
Oven1	K-OVEN 07	105	105	5/31/2016	15:28	6/1/2016	09:00	

	Cal EQID	Cal Start Value	Cal End Value	Start Date	Start Time	End Date	End Time
Calibration1	K-Balance-16	1.00, 100.00	1.00, 100.00	5/31/2016	14:52	5/31/2016	15:28
Calibration2	K-Balance-16	1.00, 100.00	1.00, 100.00	6/1/2016	09:01	6/1/2016	09:08

Comments: ZR Reviewed 6-1-16 L.J.

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Preparation Information Benchsheet

Prep Run: 262051 **Prep Workflow**: MetDigSICP **Status**: Prepped **Prep Date**: 05/23/2016 13:00
Team: Metals **Prep Method**: EPA 3050B **Current Step**: Digestion **Due Date**: 06/01/2016
Analyst: jchan **Rush/NPDES**: N/A **Hold Date**: 11/06/2016

Lab Code	Client ID	Bottle #	Initial Amt	Initial Basis	Final Volume	Spike Amt	Spike ID	Comments
KQ1605183-01	Method Blank		1.00 g	As Received	100 mL			10% HNO3, 10% HCl
KQ1605183-02	Lab Control Sample		1.00 g	As Received	100 mL	1 mL 2 mL 1 mL 1 mL	171671 172201 172203 172509	10% HNO3, 10% HCl
K1605069-001	FTBL-SED-25-0-6-051016	.01	1.00 g	As Received	100 mL			10% HNO3, 10% HCl
K1605069-001; KQ1605183-03	Matrix Spike	.01	1.02 g	As Received	100 mL	1 mL 2 mL 1 mL 1 mL	171671 172201 172203 172509	10% HNO3, 10% HCl
K1605069-001; KQ1605183-04	Duplicate Matrix Spike	.01	1.09 g	As Received	100 mL	1 mL 2 mL 1 mL 1 mL	171671 172201 172203 172509	10% HNO3, 10% HCl
K1605069-002	FTBL-SED-11-0-6-051016	.01	1.17 g	As Received	100 mL			10% HNO3, 10% HCl
K1605069-003	FTBL-SED-12-0-6-051016	.01	1.25 g	As Received	100 mL			10% HNO3, 10% HCl
K1605069-004	FD051016	.01	1.13 g	As Received	100 mL			10% HNO3, 10% HCl
K1605069-005	FTBL-SED-13-0-6-051016	.01	1.26 g	As Received	100 mL			10% HNO3, 10% HCl
K1605069-006	FTBL-SED-20-0-6-051116	.01	1.30 g	As Received	100 mL			10% HNO3, 10% HCl
K1605069-007	FTBL-SED-20-12-18-051116	.01	1.29 g	As Received	100 mL			10% HNO3, 10% HCl
K1605069-008	FTBL-SED-19-0-6-051116	.01	1.25 g	As Received	100 mL			10% HNO3, 10% HCl
K1605069-009	FTBL-SED-19-12-18-051116	.01	1.32 g	As Received	100 mL			10% HNO3, 10% HCl
K1605069-010	FTBL-SED-18-0-6-051116	.01	1.26 g	As Received	100 mL			10% HNO3, 10% HCl
K1605069-011	FTBL-SED-17-0-6-051116	.01	1.27 g	As Received	100 mL			10% HNO3, 10% HCl
K1605069-012	FTBL-SED-16-0-6-051116	.01	1.38 g	As Received	100 mL			10% HNO3, 10% HCl
K1605069-013	FTBL-SED-52-0-6-051116	.01	1.42 g	As Received	100 mL			10% HNO3, 10% HCl
K1605069-014	FTBL-SED-01-0-6-051216	.01	1.28 g	As Received	100 mL			10% HNO3, 10% HCl
K1605069-015	FTBL-SED-02-0-6-051216	.01	1.24 g	As Received	100 mL			10% HNO3, 10% HCl
K1605069-016	FD051216	.01	1.26 g	As Received	100 mL			10% HNO3, 10% HCl
K1605069-017	FTBL-SED-03-0-6-051216	.01	1.18 g	As Received	100 mL			10% HNO3, 10% HCl
K1605069-018	FTBL-SED-04-0-6-051216	.01	1.21 g	As Received	100 mL			10% HNO3, 10%

								HCl
K1605069-019	FTBL-SED-05-0-6-051216	.01	1.25 g	As Received	100 mL			10% HNO3, 10% HCl

23 Total Samples consisting of 19 Client Samples, 2 Client QC Samples, 2 Batch QC Samples associated with the current Prep Run.

Spiking Solutions

Name	Type	ID	Expires	Name	Type	ID	Expires
K-MET SS1	Spike	172201	12/1/2016	K-MET SS4	Spike	171671	5/23/2016
K-MET SS3	Spike	172509	7/13/2016	K-MET SS5	Spike	172203	1/28/2017

Preparation Materials

Step	Name	ID	Step	Name	ID
Digestion	Teflon Chips	80163	Digestion	K-MET 100ml Centrifuge Tube	87637
Digestion	K-MET H2O2	84550	Digestion	K-MET HNO3	87968
Digestion	K-MET HCL	87502			

Preparation Hardware / Equipment

Step	Name	Property	Value		Step	Name	Property	Value	
Digestion	K-Balance-02	Date Checked	5/23/16		Digestion	K-BlockDigester-02	Observed Temperature	95.0	deg C
Digestion	K-BlockDigester-02	Corrected Temperature	0.0	deg C	Digestion	K-BlockDigester-02	Thermometer ID 1107973		NONE
Digestion	K-BlockDigester-02	Correction Factor	0.0	deg C	Digestion	K-BlockDigester-02	Thermometer Location	15	NONE

Preparation Steps

Step	Started	Finished	By	Assisted By	Training?	Comments
Digestion	23-MAY-16 13:00	23-MAY-16 15:45	jchan		N	

Comments

1st Reflux: 1300 off 1315, 2nd Reflux: 1330 off 1400, HCl Reflux: 1530 off 1545.

Review

Reviewed by: [redacted] Date: 5/25/16

METALS SPIKING SOLUTIONS CONCENTRATIONS FORM

Solution Name	Element	mLs of 1000ppm Solution	Final Volume	Solution Conc. mg/L	Enter mls Added
K-MET SS1 *** Add after HNO3 and before ALS-89 when making the solution	HNO3	50.0	1000ml	-	
	Al	100*	1000ml	200	
	Ag	100*	1000ml	5	
	Ba	100*	1000ml	100	
	Be	100*	1000ml	5	
	Cd	100*	1000ml	5	
	Co	100*	1000ml	50	
	Cr	100*	1000ml	20	
	Cu	100*	1000ml	25	
	Fe	100*	1000ml	100	
	Pb	100*	1000ml	50	
	Mn	100*	1000ml	50	
	Ni	100*	1000ml	50	
	Sb***	50	1000ml	50	
	V	100*	1000ml	50	
	Zn	100*	1000ml	50	
K-MET SS2	HNO3	25.0	500ml	-	
	As	2.0	500ml	4	
	Cd	2.0	500ml	4	
	Pb	2.0	500ml	4	
	Se	2.0	500ml	4	
	Tl	2.0	500ml	4	
	Cu	2.0	500ml	4	
K-MET SS3	HNO3	25.0	500ml	-	
	As	50.0	500ml	100	
	Se	50.0	500ml	100	
	Tl	10.0	500ml	20	
	Hg	6	500	12	
K-MET SS4	HNO3	25	500ml	-	
	B	50	500ml	100	
	Mo	50	500ml	100	
K-MET SS5	HNO3	10.0	200ml	-	
	K**	20	200ml	1000	
	Na**	20	200ml	1000	
	Mg**	20	200ml	1000	
	Ca**	20	200ml	1000	
K-MET GFLCSW	HNO3	10.0	1000ml	-	
	As, Pb, Se, Tl	5.0	1000ml	2.5	
	Cd	-	-	1.25	
	Cu	2.5	1000ml	2.5	
K-MET QCP-CICV-1	Ca, Mg, Na, K	no dilution	-	2500	
	Al, Ba	no dilution	-	1000	
	Fe	no dilution	-	500	
	Co, Mn, Ni, V, Zn	no dilution	-	250	
	Cu, Ag	no dilution	-	125	
	Cr	no dilution	-	100	
	Be	no dilution	-	25	
K-MET QCP-CICV-3	As, Pb, Se, Tl	no dilution	-	500	
	Cd	no dilution	-	250	

* Denotes volume of mixed stock standard.
** Denotes 10,000 ppm individual stock standards.

Standard	mls of standard	ppm	Logbook #	Exp. Date

Prep Run: 262051 **Prep Workflow**: MetDigSICP **Status**: Draft **Prep Date**: 05/23/2016 07:16
Team: Metals **Prep Method**: EPA 3050B **Current Step**: Digestion **Due Date**: 05/23/2016
Analyst: KLINN **Rush/NPDES**: N/A **Hold Date**: 11/06/2016

Lab Code	Client ID	Bottle #	Target Amt	Initial Amt	Initial Basis	Final Volume	Spike Amt	Spike ID	Comments
KQ1605183-01	Method Blank		1.00 g	1.00					
KQ1605183-02	Lab Control Sample		1.00 g	1.00			1 mL 2 mL 1 mL 1 mL	171671 172201 172203 172509	
K1605069-001	FTBL-SED-25-0-6-051016	.01	1.00 g	1.00					
K1605069-001: KQ1605183-03	Matrix Spike	.01	1.00 g	1.02			1 mL 2 mL 1 mL 1 mL	171671 172201 172203 172509	
K1605069-001: KQ1605183-04	Duplicate Matrix Spike	.01	1.00 g	1.09			1 mL 2 mL 1 mL 1 mL	171671 172201 172203 172509	
K1605069-002	FTBL-SED-11-0-6-051016	.01	1.00 g	1.17					
K1605069-003	FTBL-SED-12-0-6-051016	.01	1.00 g	1.25					
K1605069-004	FD051016	.01	1.00 g	1.13					
K1605069-005	FTBL-SED-13-0-6-051016	.01	1.00 g	1.26					
K1605069-006	FTBL-SED-20-0-6-051116	.01	1.00 g	1.30					
K1605069-007	FTBL-SED-20-12-18-051116	.01	1.00 g	1.29					
K1605069-008	FTBL-SED-19-0-6-051116	.01	1.00 g	1.25					
K1605069-009	FTBL-SED-19-12-18-051116	.01	1.00 g	1.32					
K1605069-010	FTBL-SED-18-0-6-051116	.01	1.00 g	1.26					
K1605069-011	FTBL-SED-17-0-6-051116	.01	1.00 g	1.27					
K1605069-012	FTBL-SED-16-0-6-051116	.01	1.00 g	1.38					
K1605069-013	FTBL-SED-52-0-6-051116	.01	1.00 g	1.42					
K1605069-014	FTBL-SED-01-0-6-051216	.01	1.00 g	1.28					
K1605069-015	FTBL-SED-02-0-6-051216	.01	1.00 g	1.24					
K1605069-016	FD051216	.01	1.00 g	1.26					
K1605069-017	FTBL-SED-03-0-6-051216	.01	1.00 g	1.18					
K1605069-018	FTBL-SED-04-0-6-051216	.01	1.00 g	1.21					

DOD 5.0

K1605069-019	FTBL-SED-05-0-6-051216	.01	1.00 g	1.25				

23 Total Samples consisting of 19 Client Samples, 2 Client QC Samples, 2 Batch QC Samples associated with the current Prep Run.

Spiking Solutions

Name	Type	ID	Expires	Name	Type	ID	Expires
K-MET SS1	Spike	172201	12/1/2016	K-MET SS4	Spike	171671	5/23/2016
K-MET SS3	Spike	172509	7/13/2016	K-MET SS5	Spike	172203	1/28/2017

Preparation Materials

Preparation Hardware / Equipment

BD-02 (15)

Preparation Steps

Step	Started	Finished	By	Assisted By	Training?	Comments
Digestion						

Comments

5/27/16

Service Request #	K1605069 (1-12)		
Calibration	052616AMS05		
QC in calibration	052616AMS05		
QC Service Request #	K1605069		
STARLIMS run #	498184		
CAL STD	MS20-41-C		MS20-39-D
ICV STD	MS20-39-C	ICSAB STD	MS20-39-E
LLICV STD	MS20-40-D	INT STD	MS20-29-I

6020 DOD Data Review Form

	Yes	No	NA
1. Mass calibration <0.1 amu?	X		
2. Resolution <0.9 amu at 10% peak height?	X		
3. Stability RSD ≤5% for five replicates?	X		
4. Appropriate standardization completed?	X		
5. ICV within 10% of true value?	X		
6. CCV's within 10% of true?	X		
7. ICB/CCB's <LOD?	X		
8. Initial Low-level cal. check ± 20%	X		
9. ICSA/ICSAB within ± 20%	X		
10. Method blank <½ the LOQ?	X		
11. LCS within 80-120% DoD limit?	X		
12. Spikes within 80-120% DoD limit?	X	X	
13. Duplicate Spike RPD <20% DoD limit?	X		
14. Serial dilution within 10%?	X		
15. Post spike within 80-120% DoD limit?	X		
16. Internal standards within 30-120%?	X		
17. Linear range established with High CCV?	X		
18. Adequate rinse out time allowed?	X		
19. Interferences checked?	X		
20. Se over MRL?		X	
21. Cd Correction Applied?		X	
22. Was run prematurely stopped, If so why?		X	

Comments: LRS=500 ppb Be, As, Se, Sb. 1000ppb Ni, Cu, Pb, 5000ppb Zn.
Sb spikes are out of control. PDS is in control
.Report & flag

CCV out of control for Pb
see 052716A for Pb
reruns

Primary Review by [redacted] Date 5/27/16
Secondary Review by [redacted] Date 5/31/16

R:\icp\misc\data review forms\icpms review form

Data Review Form

Service Request #:	**K1605069**
Instrument ID#:	**K-ICP-MS-05**
DataFile Name:	**R:\ICP\WIP\DATA\K-ICP-MS-05 (Agilent)\052616A.csv**
RUNNO:	**498184**

K1605069-001MS - Metals T

MS Recovery

6020A/Metals T - 123 Sb [He] - Recovery: 69 Limits: 72 - 124

K1605069-001DMS - Metals T

DMS Recovery

6020A/Metals T - 123 Sb [He] - Recovery: 63 Limits: 72 - 124

Report + FLAG
POS is control

Analytical Method 6020A

Primary Approver: [redacted] 5/27/16

Secondary Approver: [redacted] 5/31/16

	Sample						
		Rjct	Data File	Acq. Date-Time	Type	Sample Name	Comment
1			001CALB.	5/26/2016 8:48:09 AM	CalBlk	Rinse	
2			002CALB.	5/26/2016 8:52:51 AM	CalBlk	Prime	
3			003CALB.	5/26/2016 8:57:47 AM	CalBlk	Blank	
4			004CALS.	5/26/2016 9:02:07 AM	CalStd	25ppb	
5			005_ICV.d	5/26/2016 9:06:27 AM	ICV	ICV	
6			006_CCV.	5/26/2016 9:10:46 AM	CCV	CCV	
7			007_ICB.d	5/26/2016 9:14:36 AM	ICB	ICB	
8			008_CCB.	5/26/2016 9:18:26 AM	CCB	CCB	
9			009LICV.d	5/26/2016 9:22:15 AM	LLICV	LLICVS	
10			010ICSA.d	5/26/2016 9:26:07 AM	ICSA	ICSA	
11			011ICSB.d	5/26/2016 9:29:55 AM	ICSB	ICSAB	
12			012_PB.d	5/26/2016 9:33:45 AM	PB	KQ1605097-01	5
13			013_LCS.d	5/26/2016 9:37:34 AM	LCS	KQ1605097-02	20
14			014_ARF.d	5/26/2016 9:41:24 AM	AllRef	K1604717-001	5
15			015SMPL.	5/26/2016 9:45:11 AM	Sample	K1604717-001L	25
16			016_PDS.d	5/26/2016 9:49:02 AM	PDS	K1604717-001A	5
17	✓		017_Spk.d	5/26/2016 9:52:51 AM	Spike	K1604717-001S	5
18	✓		018_Spk.d	5/26/2016 9:56:40 AM	Spike	K1604717-001SD	5
19			019SMPL.	5/26/2016 10:00:27 AM	Sample	K1604717-002	5
20			020SMPL.	5/26/2016 10:04:16 AM	Sample	K1604717-003	5
21			021SMPL.	5/26/2016 10:08:06 AM	Sample	K1604717-004	5
22			022_CCV.	5/26/2016 10:11:58 AM	CCV	CCV	
23			023_CCB.	5/26/2016 10:15:46 AM	CCB	CCB	
24			024SMPL.	5/26/2016 10:19:37 AM	Sample	K1604717-005	5
25			025SMPL.	5/26/2016 10:23:26 AM	Sample	K1604717-006	5
26			026SMPL.	5/26/2016 10:27:16 AM	Sample	K1604717-007	5
27			027SMPL.	5/26/2016 10:31:05 AM	Sample	K1604717-008	5
28			028SMPL.	5/26/2016 10:34:53 AM	Sample	K1604717-009	5
29			029SMPL.	5/26/2016 10:38:42 AM	Sample	K1604717-010	5
30			030SMPL.	5/26/2016 10:42:31 AM	Sample	K1604717-011	5
31			031SMPL.	5/26/2016 10:46:20 AM	Sample	K1604717-012	5
32			032SMPL.	5/26/2016 10:50:10 AM	Sample	K1604717-013	5
33			033SMPL.	5/26/2016 10:54:00 AM	Sample	K1604717-014	5
34			034_CCV.	5/26/2016 10:57:50 AM	CCV	CCV	
35			035_CCB.	5/26/2016 11:01:39 AM	CCB	CCB	

	Sample						
		Rjct	Data File	Acq. Date-Time	Type	Sample Name	Comment
36			036LCCV.	5/26/2016 11:05:30 AM	LLCCV	LLCCVS	
37			037SMPL.	5/26/2016 11:09:21 AM	Sample	K1604717-015	5
38			038SMPL.	5/26/2016 11:13:14 AM	Sample	K1604717-016	5
39			039SMPL.	5/26/2016 11:17:04 AM	Sample	K1604717-017	5
40			040SMPL.	5/26/2016 11:20:54 AM	Sample	K1604717-018	5
41			041SMPL.	5/26/2016 11:24:44 AM	Sample	K1604717-019	5
42			042SMPL.	5/26/2016 11:28:34 AM	Sample	K1604717-020	5
43			043_PB.d	5/26/2016 11:32:23 AM	PB	KQ1605151-01	5
44			044_LCS.d	5/26/2016 11:36:13 AM	LCS	KQ1605151-02	20
45			045_ARF.d	5/26/2016 11:40:01 AM	AllRef	K1604717-021	5
46			046SMPL.	5/26/2016 11:43:51 AM	Sample	K1604717-021L	25
47			047_CCV.	5/26/2016 11:47:42 AM	CCV	CCV	
48			048_CCB.	5/26/2016 11:52:01 AM	CCB	CCB	
49			049SMPL.	5/26/2016 11:57:14 AM	Sample	LRSTD	
50			050_PDS.d	5/26/2016 12:00:58 PM	PDS	K1604717-021A	5
51	✓		051_Spk.d	5/26/2016 12:04:47 PM	Spike	K1604717-021S	5
52	✓		052_Spk.d	5/26/2016 12:08:35 PM	Spike	K1604717-1SD	5
53			053SMPL.	5/26/2016 12:12:24 PM	Sample	K1604717-022	5
54			054SMPL.	5/26/2016 12:16:13 PM	Sample	K1604717-023	5
55			055SMPL.	5/26/2016 12:20:03 PM	Sample	K1604717-024	5
56			056SMPL.	5/26/2016 12:23:54 PM	Sample	K1604717-025	5
57			057SMPL.	5/26/2016 12:27:43 PM	Sample	K1604717-026	5
58			058_CCV.	5/26/2016 12:31:31 PM	CCV	CCV	
59			059_CCB.	5/26/2016 12:35:20 PM	CCB	CCB	
60			060LCCV.	5/26/2016 12:39:10 PM	LLCCV	LLCCVS	
61			061_PB.d	5/26/2016 12:42:59 PM	PB	KQ1605187-01	5
62			062_LCS.d	5/26/2016 12:46:49 PM	LCS	KQ1605187-02	20
63			063_ARF.d	5/26/2016 12:50:37 PM	AllRef	K1605072-001	5
64			064SMPL.	5/26/2016 12:54:37 PM	Sample	K1605072-001L	25
65			065_PDS.d	5/26/2016 12:58:24 PM	PDS	K1605072-001A	5
66	✓		066_Spk.d	5/26/2016 1:02:13 PM	Spike	K1605072-001S	5
67	✓		067_Spk.d	5/26/2016 1:06:02 PM	Spike	K1605072-001SD	5
68			068SMPL.	5/26/2016 1:09:49 PM	Sample	K1605072-002	5
69			069SMPL.	5/26/2016 1:13:37 PM	Sample	K1605072-003	5
70			070SMPL.	5/26/2016 1:17:26 PM	Sample	K1605072-004	5

	Sample						
		Rjct	Data File	Acq. Date-Time	Type	Sample Name	Comment
71			071_CCV.	5/26/2016 1:21:14 PM	CCV	CCV	
72			072_CCB.	5/26/2016 1:25:04 PM	CCB	CCB	
73			073SMPL.	5/26/2016 1:28:54 PM	Sample	K1605072-005	5
74			074SMPL.	5/26/2016 1:32:43 PM	Sample	K1605072-006	5
75			075SMPL.	5/26/2016 1:36:33 PM	Sample	K1605072-007	5
76			076SMPL.	5/26/2016 1:40:24 PM	Sample	K1605072-008	5
77			077SMPL.	5/26/2016 1:44:13 PM	Sample	K1605072-009	5
78			078SMPL.	5/26/2016 1:48:03 PM	Sample	K1605072-010	5
79			079SMPL.	5/26/2016 1:51:51 PM	Sample	K1605072-011	5
80			080SMPL.	5/26/2016 1:55:42 PM	Sample	K1605072-012	5
81			081SMPL.	5/26/2016 1:59:31 PM	Sample	K1605072-013	5
82			082SMPL.	5/26/2016 2:03:21 PM	Sample	K1605072-014	5
83			083_CCV.	5/26/2016 2:07:11 PM	CCV	CCV	
84			084_CCB.	5/26/2016 2:11:01 PM	CCB	CCB	
85			085LCCV.	5/26/2016 2:14:51 PM	LLCCV	LLCCVS	
86			086_QC1.d	5/26/2016 2:18:42 PM	QC1	LLCCVS 2X	
87			087SMPL.	5/26/2016 2:22:33 PM	Sample	LLCCVS 1.0 ppb	
88			088SMPL.	5/26/2016 2:26:23 PM	Sample	K1605072-015	5
89			089SMPL.	5/26/2016 2:30:11 PM	Sample	K1605072-016	5
90			090SMPL.	5/26/2016 2:34:02 PM	Sample	K1605072-017	5
91			091SMPL.	5/26/2016 2:37:52 PM	Sample	K1605072-018	5
92			092SMPL.	5/26/2016 2:41:41 PM	Sample	K1605072-019	5
93			093SMPL.	5/26/2016 2:45:31 PM	Sample	K1605072-020	5
94			094_CCV.	5/26/2016 2:49:20 PM	CCV	CCV	
95			095_CCB.	5/26/2016 2:53:11 PM	CCB	CCB	
96			096LCCV.	5/26/2016 2:57:02 PM	LLCCV	LLCCVS	
97			097_QC1.d	5/26/2016 3:00:51 PM	QC1	LLCCVS 2X	
98			098SMPL.	5/26/2016 3:04:41 PM	Sample	LLCCVS 1.0 ppb	
99			099_PB.d	5/26/2016 3:08:32 PM	PB	KQ1605183-01	5
100			100_LCS.d	5/26/2016 3:12:22 PM	LCS	KQ1605183-02	20
101			101_ARF.d	5/26/2016 3:16:13 PM	AllRef	K1605069-001	5
102			102SMPL.	5/26/2016 3:20:06 PM	Sample	K1605069-001L	25
103			103_PDS.d	5/26/2016 3:23:56 PM	PDS	K1605069-001A	5
104	✓		104_Spk.d	5/26/2016 3:27:45 PM	Spike	K1605069-001S	5
105	✓		105_Spk.d	5/26/2016 3:31:36 PM	Spike	K1605069-001SD	5

Sample		Rjct	Data File	Acq. Date-Time	Type	Sample Name	Comment
106			106SMPL.	5/26/2016 3:35:25 PM	Sample	K1605069-002	5
107			107SMPL.	5/26/2016 3:39:15 PM	Sample	K1605069-003	5
108			108SMPL.	5/26/2016 3:43:06 PM	Sample	K1605069-004	5
109			109_CCV.	5/26/2016 3:46:55 PM	CCV	CCV	
110			110_CCB.	5/26/2016 3:50:46 PM	CCB	CCB	
111			111SMPL.	5/26/2016 3:54:36 PM	Sample	K1605069-005	5
112	✓		112SMPL.	5/26/2016 3:58:25 PM	Sample	LRSTD	
113			113SMPL.	5/26/2016 4:02:11 PM	Sample	K1605069-006	5
114			114SMPL.	5/26/2016 4:05:59 PM	Sample	K1605069-007	5
115			115SMPL.	5/26/2016 4:09:48 PM	Sample	K1605069-008	5
116			116SMPL.	5/26/2016 4:13:36 PM	Sample	K1605069-009	5
117			117SMPL.	5/26/2016 4:17:25 PM	Sample	K1605069-010	5
118			118SMPL.	5/26/2016 4:21:13 PM	Sample	K1605069-011	5
119			119SMPL.	5/26/2016 4:25:02 PM	Sample	K1605069-012	5
120	✓		120SMPL.	5/26/2016 4:28:54 PM	Sample	LRSTD	
121			121_CCV.	5/26/2016 4:33:29 PM	CCV	CCV	
122			122_CCB.	5/26/2016 4:37:18 PM	CCB	CCB	
123	✓		123LCCV.	5/26/2016 4:41:09 PM	LLCCV	LLCCVS	
124			124LCCV.	5/26/2016 4:45:00 PM	LLCCV	LLCCVS	

Analyte	Name	Mass	ISTD	Tune Mode
1	Be	9	6	No Gas
2	Ni	60	72	He
3	Ni	62	72	He
4	Cu	63	72	He
5	Cu	65	72	He
6	Zn	66	72	He
7	As	75	72	He
8	Se	77	72	H2
9	Se	78	72	H2
10	Sb	121	115	He
11	Sb	123	115	He
12	[Pb]	206	175	He
13	[Pb]	207	175	He
14	Pb	208	175	He

Analyte				
Name		Mass	ISTD	Tune Mode
15	Li	6		No Gas
16	Sc	45		No Gas
17	Sc	45		He
18	Sc	45		H2
19	Ge	72		No Gas
20	Ge	72		He
21	Ge	72		H2
22	In	115		He
23	Lu	175		He

Run terminated pb out of control

Sample							
		Rjct	Data File	Acq. Date-Time	Type	Sample Name	Comment
125			125SMPL.	5/26/2016 4:52:51 PM	Sample	K1605069-013	5
126			126SMPL.	5/26/2016 4:56:39 PM	Sample	K1605069-014	5
127			127SMPL.	5/26/2016 5:00:28 PM	Sample	K1605069-015	5
128			128SMPL.	5/26/2016 5:04:18 PM	Sample	K1605069-016	5
129			129SMPL.	5/26/2016 5:08:08 PM	Sample	K1605069-017	5
130			130SMPL.	5/26/2016 5:11:57 PM	Sample	K1605069-018	5
131			131SMPL.	5/26/2016 5:15:46 PM	Sample	K1605069-019	5
132			132_PB.d	5/26/2016 5:19:37 PM	PB	KQ1605183-01	5
133			133_LCS.d	5/26/2016 5:23:26 PM	LCS	KQ1605183-02	20
134			134SMPL.	5/26/2016 5:27:17 PM	Sample	K1604894-001	5
135			135_CCV.	5/26/2016 5:3	[redacted]	CCV	
136			136_CCV.	5/26/2016 5:3	[redacted]	CCV	
137			137_CCV.	5/26/2016 5:3	[redacted]	6/26/16	
138			138_CCB.	5/26/2016 5:42:36 PM	CCB	CCB	
139			139SMPL.	5/26/2016 5:46:26 PM	Sample	K1604894-001D	5
140			140SMPL.	5/26/2016 5:50:16 PM	Sample	K1604894-001L	5
141			141SMPL.	5/26/2016 5:54:05 PM	Sample	K1604894-001A	5
142			142SMPL.	5/26/2016 5:57:54 PM	Sample	K1604894-001S	5
143			143SMPL.	5/26/2016 6:01:42 PM	Sample	K1604894-002	5
144			144SMPL.	5/26/2016 6:05:32 PM	Sample	K1604894-003	5
145			145SMPL.	5/26/2016 6:09:21 PM	Sample	K1604894-004	5
146			146SMPL.	5/26/2016 6:13:11 PM	Sample	K1604894-005	5
147			147SMPL.	5/26/2016 6:17:02 PM	Sample	K1604894-006	5
148			148SMPL.	5/26/2016 6:20:50 PM	Sample	K1604894-007	5

5/26/16

	Sample						
		Rjct	Data File	Acq. Date-Time	Type	Sample Name	Comment
149	✓		149_CCV.	5/26/2016 6:24:41 PM	CCV	CCV	
150			150_CCB.	5/26/2016 6:28:31 PM	CCB	CCB	
151			151SMPL.	5/26/2016 6:32:20 PM	Sample	K1604894-008	5
152			152SMPL.	5/26/2016 6:36:10 PM	Sample	K1604894-009	5
153			153SMPL.	5/26/2016 6:39:59 PM	Sample	K1604894-010	5
154			154SMPL.	5/26/2016 6:43:48 PM	Sample	K1604894-011	5
155	✓		155_CCV.	5/26/2016 6:47:39 PM	CCV	CCV	
156			156_CCB.	5/26/2016 6:51:29 PM	CCB	CCB	
157			157LCCV.	5/26/2016 6:55:19 PM	LLCCV	LLCCVS	
158			158_QC1.d	5/26/2016 6:59:07 PM	QC1	LLCCVS 2X	
159			159SMPL.	5/26/2016 7:02:56 PM	Sample	LLCCVS 1.0 ppb	

US EPA Tune Check Sample Report

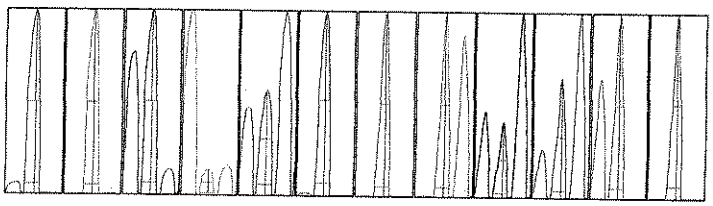
Batch Folder D:\Data\Experiments\052616A.b
Report Comment ALS Tune
Instrument Name G3281A JP13482848

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
7	39084	4.16	5.00	
9	16683	3.98	5.00	
24	93664	4.20	5.00	
25	12778	4.65	5.00	
26	15156	4.84	5.00	
59	162869	3.89	5.00	
115	250638	4.21	5.00	
206	57714	3.56	5.00	
207	51137	4.02	5.00	
208	125882	3.67	5.00	
209	194627	4.04	5.00	
238	250439	3.28	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
7	38307	36582	39941	40408	40182
9	16156	15787	17212	17081	17180
24	91257	87876	96028	96802	96357
25	12311	12048	13155	13491	12882
26	14757	14064	15611	15839	15512
59	158648	153796	166993	168186	166721
115	242626	236188	256462	259051	258865
206	56688	54566	59332	59055	58930
207	50306	47904	52158	52430	52888
208	123320	118962	129510	129306	128311
209	190195	182901	200409	198616	201016
238	246120	237933	256087	256458	255595

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
7	6406	7.05	6.9 - 7.1		0.789	0.900	
9	2798	9.00	8.9 - 9.1		0.785	0.900	
24	15180	23.95	23.9 - 24.1		0.788	0.900	
25	2041	24.95	24.9 - 25.1		0.788	0.900	
26	2442	25.95	25.9 - 26.1		0.807	0.900	
59	28529	58.95	58.9 - 59.1		0.794	0.900	
115	50496	115.00	114.9 - 115.1		0.760	0.900	
206	12469	206.00	205.9 - 206.1		0.746	0.900	
207	10954	207.00	206.9 - 207.1		0.764	0.900	
208	26935	208.00	207.9 - 208.1		0.759	0.900	
209	41486	209.00	208.9 - 209.1		0.753	0.900	
238	52359	238.00	237.9 - 238.1		0.772	0.900	

X% = 5 **Integration Time [sec] =** 0.1 **Acquisition Time [sec] =** 279 **Y Axis =** Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.57	L/min			
RF Matching	1.76	V	Option Gas	0.0	%			
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps			
S/C Temp	2	°C						

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	8.8	V			
Extract 2	-145.0	V	Cell Entrance	-30	V			
Omega Bias	-80	V	Cell Exit	-50	V			
Deflect	11.4	V						

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	false		3rd Gas Flow	0	%			
He Flow	0.0	mL/min	OctP Bias	-8.0	V			
H2 Flow	0.0	mL/min	OctP RF	190	V			
Energy Discrimination	5.0	V						

Calibration Blank Report

Sample Table

Sample Name	Blank
Data File Name	003CALB.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T08:57:47-07:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	Tune Mode	CPS	%RSD
Be	9	No Gas	17	34.60
Ni	60	He	113	4.49
Ni	62	He	29	188.75
Cu	63	He	100	23.33
Cu	65	He	51	7.36
Zn	66	He	41	41.07
As	75	He	6	833.33
Se	77	H2	651	0.84
Se	78	H2	7	597.75
Sb	121	He	79	13.21
Sb	123	He	46	58.84
[Pb]	206	He	87	46.96
[Pb]	207	He	71	16.59
Pb	208	He	336	4.74

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD
Li	6	No Gas	604198	0.26
Ge	72	He	81288	0.70
Ge	72	H2	933781	1.06
In	115	He	717634	0.96
Lu	175	He	2064230	0.17

Calibration Standard Report

Sample Table

Sample Name	25ppb
Data File Name	004CALS.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T09:02:07-07:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	CPS	%RSD
Be	9	No Gas	65047	0.00
Ni	60	He	33985	0.00
Ni	62	He	5394	0.10
Cu	63	He	98885	0.00
Cu	65	He	49694	0.00
Zn	66	He	12578	0.01
As	75	He	7886	0.02
Se	77	H2	5169	0.04
Se	78	H2	14395	0.01
Sb	121	He	52512	0.00
Sb	123	He	42453	0.00
[Pb]	206	He	145751	0.00
[Pb]	207	He	129829	0.00
Pb	208	He	597436	0.00

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	600124	1.37	604198	99.33	30	120	
Ge	72	He	85780	1.65	81288	105.53	30	120	
Ge	72	H2	1015472	1.17	933781	108.75	30	120	
In	115	He	765161	0.15	717634	106.62	30	120	
Lu	175	He	2197620	0.92	2064230	106.46	30	120	

Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICV
Data File Name	005_ICV.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T09:06:27-07:00
Sample Type	ICV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	2.536	2.133	6561	0.79	2.5	101	
Ni	60	He	24.949	1.652	34157	1.13	25	100	
Ni	62	He	24.889	3.684	5408	3.56	25	100	
Cu	63	He	12.553	0.778	50061	1.46	12.5	100	
Cu	65	He	12.515	1.417	25079	1.60	12.5	100	
Zn	66	He	24.501	1.884	12418	1.81	25	98	
As	75	He	24.639	1.558	7827	1.19	25	99	
Se	77	H2	25.194	3.152	5126	1.00	25	101	
Se	78	H2	24.734	3.048	14028	1.78	25	99	
Sb	121	He	25.287	0.288	52742	0.76	25	101	
Sb	123	He	25.207	0.438	42502	0.50	25	101	
[Pb]	206	He	24.991	0.114	145500	1.18	25	100	
[Pb]	207	He	25.905	0.822	134334	0.82	25	104	
Pb	208	He	25.494	0.569	608375	0.62	25	102	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	595373	1.45	604198	98.54	30	120	
Ge	72	He	86382	0.89	81288	106.27	30	120	
Ge	72	H2	1000609	1.72	933781	107.16	30	120	
In	115	He	759783	0.53	717634	105.87	30	120	
Lu	175	He	2194419	1.09	2064230	106.31	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	006_CCV.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T09:10:46-07:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	24.867	0.402	64335	0.03	25	99	
Ni	60	He	25.308	2.506	34316	1.78	25	101	
Ni	62	He	25.731	1.413	5536	1.07	25	103	
Cu	63	He	25.087	1.319	98993	1.45	25	100	
Cu	65	He	24.884	1.280	49337	0.55	25	100	
Zn	66	He	24.286	2.827	12193	3.01	25	97	
As	75	He	25.390	1.282	7989	0.42	25	102	
Se	77	H2	25.559	2.773	5219	2.01	25	102	
Se	78	H2	24.781	0.186	14134	0.77	25	99	
Sb	121	He	25.343	0.481	52920	0.98	25	101	
Sb	123	He	25.376	0.535	42838	0.89	25	102	
[Pb]	206	He	25.118	1.218	147384	0.45	25	100	
[Pb]	207	He	25.316	1.258	132326	1.19	25	101	
Pb	208	He	25.095	1.118	603589	0.43	25	100	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	596637	0.39	604198	98.75	30	120	
Ge	72	He	85564	0.94	81288	105.26	30	120	
Ge	72	H2	1005933	0.64	933781	107.73	30	120	
In	115	He	760665	0.57	717634	106.00	30	120	
Lu	175	He	2211789	0.78	2064230	107.15	30	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB
Data File Name	007_ICB.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T09:14:36-07:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	0.001	76.3	18	8.3	0.04	
Ni	60	He	-0.001	-3395.3	114	29.2	0.2	
Ni	62	He	-0.013	-233.1	27	21.7	0.2	
Cu	63	He	0.001	385.9	108	20.6	0.2	
Cu	65	He	0.000	4948.8	53	59.6	0.2	
Zn	66	He	0.005	341.2	44	18.9	1	
As	75	He	-0.003	-410.6	5	65.8	0.25	
Se	77	H2	-0.029	-966.6	684	8.7	20	
Se	78	H2	0.003	126.5	10	26.0	0.5	
Sb	121	He	0.005	115.4	94	12.1	0.2	
Sb	123	He	0.020	40.6	83	17.1	0.05	
[Pb]	206	He	-0.001	-371.8	86	22.2	0.1	
[Pb]	207	He	-0.004	-112.3	57	36.7	0.1	
Pb	208	He	-0.001	-25.0	324	2.1	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	575492	0.70	604198	95.25	30	120	
Ge	72	He	83248	2.28	81288	102.41	30	120	
Ge	72	H2	987725	2.03	933781	105.78	30	120	
In	115	He	758596	1.08	717634	105.71	30	120	
Lu	175	He	2163195	0.98	2064230	104.79	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	008_CCB.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T09:18:26-07:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	-0.002	-128.0	12	46.1	0.04	
Ni	60	He	0.006	61.5	129	5.4	0.2	
Ni	62	He	0.056	209.8	42	57.1	0.2	
Cu	63	He	-0.001	-105.6	101	5.0	0.2	
Cu	65	He	-0.009	-66.9	37	32.8	0.2	
Zn	66	He	0.009	444.0	48	39.7	1	
As	75	He	0.001	1541.6	7	85.3	0.25	
Se	77	H2	-0.213	-136.0	663	9.1	20	
Se	78	H2	-0.009	-35.9	3	57.7	0.5	
Sb	121	He	-0.009	-47.7	65	13.6	0.2	
Sb	123	He	-0.002	-201.2	46	14.8	0.05	
[Pb]	206	He	-0.002	-91.2	80	15.0	0.1	
[Pb]	207	He	-0.004	-129.4	56	48.1	0.1	
Pb	208	He	-0.003	-51.2	282	15.0	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	601193	1.38	604198	99.50	30	120	
Ge	72	He	86117	1.91	81288	105.94	30	120	
Ge	72	H2	1004321	1.38	933781	107.55	30	120	
In	115	He	761251	0.11	717634	106.08	30	120	
Lu	175	He	2185474	1.83	2064230	105.87	30	120	

Low Level Initial Calibration Verification (LLICV) Report

Sample Table

Sample Name	LLICVS
Data File Name	009LICV.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T09:22:15-07:00
Sample Type	LLICV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	0.037	23.875	112	20.10	0.04	92	
Ni	60	He	0.418	4.080	693	1.27	0.4	105	
Ni	62	He	0.469	12.131	132	7.27	0.4	117	
Cu	63	He	0.203	3.081	917	4.47	0.2	101	
Cu	65	He	0.221	7.164	499	6.49	0.2	111	
Zn	66	He	0.916	8.122	508	6.61	1	92	
As	75	He	0.978	2.889	318	2.27	1	98	
Se	77	H2	1.914	3.784	1043	1.14	2	96	
Se	78	H2	1.997	3.928	1151	4.24	2	100	
Sb	121	He	0.099	20.559	294	13.66	0.1	99	
Sb	123	He	0.109	14.679	235	10.59	0.1	109	
[Pb]	206	He	0.098	3.997	664	3.07	0.1	98	
[Pb]	207	He	0.102	4.724	607	3.96	0.1	102	
Pb	208	He	0.098	4.536	2712	4.77	0.1	98	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	599045	0.29	604198	99.15	30	120	
Ge	72	He	86713	2.10	81288	106.67	30	120	
Ge	72	H2	1009583	0.45	933781	108.12	30	120	
In	115	He	768918	1.02	717634	107.15	30	120	
Lu	175	He	2206597	1.80	2064230	106.90	30	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA
Data File Name	010ICSA.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T09:26:07-07:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	QC Flag
Be	9	No Gas	0.001	164.7	17	12.5	
Ni	60	He	0.462	8.1	727	6.4	
Ni	62	He	0.362	29.0	106	21.5	
Cu	63	He	0.566	7.6	2286	7.8	
Cu	65	He	0.579	11.4	1172	10.0	
Zn	66	He	0.309	29.5	193	22.4	
As	75	He	0.053	8.4	22	5.2	
Se	77	H2	0.706	24.7	768	2.8	
Se	78	H2	0.003	277.8	9	50.9	
Sb	121	He	0.000	1904.7	79	12.3	
Sb	123	He	0.018	16.2	74	5.6	
[Pb]	206	He	0.067	16.3	469	12.4	
[Pb]	207	He	0.065	6.0	401	5.1	
Pb	208	He	0.067	3.3	1906	1.7	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	549077	0.54	604198	90.88	30	120	
Ge	72	He	83658	0.97	81288	102.92	30	120	
Ge	72	H2	935502	1.40	933781	100.18	30	120	
In	115	He	718552	0.52	717634	100.13	30	120	
Lu	175	He	2136932	1.03	2064230	103.52	30	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB
Data File Name	011ICSB.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T09:29:55-07:00
Sample Type	ICSB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	0.000	-226.683	15	11.55	-1	0.0	
Ni	60	He	45.145	0.440	61083	0.87	50	90.3	
Ni	62	He	46.326	1.128	9936	0.74	50	92.7	
Cu	63	He	44.871	0.673	176840	0.74	50	89.7	
Cu	65	He	45.209	0.484	89531	0.94	50	90.4	
Zn	66	He	22.411	1.847	11246	1.34	25	89.6	
As	75	He	22.963	0.328	7221	0.29	25	91.9	
Se	77	H2	24.379	5.777	4963	3.86	25	97.5	
Se	78	H2	23.454	1.654	13253	0.75	25	93.8	
Sb	121	He	0.008	151.391	95	23.73	-1	-0.8	
Sb	123	He	0.013	12.910	68	3.76	-1	-1.3	
[Pb]	206	He	0.064	15.464	461	10.43	-1	-6.4	
[Pb]	207	He	0.073	12.849	451	7.90	-1	-7.3	
Pb	208	He	0.073	12.359	2068	6.82	-1	-7.3	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	562762	1.35	604198	93.14	30	120	
Ge	72	He	85498	0.49	81288	105.18	30	120	
Ge	72	H2	996635	1.17	933781	106.73	30	120	
In	115	He	728355	0.24	717634	101.49	30	120	
Lu	175	He	2175406	3.93	2064230	105.39	30	120	

Prep Blank (PB) Report

Sample Table

Sample Name	KQ1605097-01
Data File Name	012_PB.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T09:33:45-07:00
Sample Type	PB
Dilution	1
Comment	5
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	-0.003	-44.1	10	29.6	0.04	
Ni	60	He	0.056	48.2	201	19.1	0.2	
Ni	62	He	0.045	233.8	41	55.2	0.2	
Cu	63	He	0.013	33.1	163	10.6	0.2	
Cu	65	He	0.008	44.9	71	10.8	0.2	
Zn	66	He	0.350	24.9	226	19.2	1	
As	75	He	0.004	186.4	8	27.2	0.25	
Se	77	H2	-0.191	-31.4	678	0.2	2	
Se	78	H2	0.000	-4958.6	8	21.7	0.5	
Sb	121	He	-0.015	-34.2	55	19.9	0.1	
Sb	123	He	-0.001	-529.1	49	19.2	0.05	
[Pb]	206	He	0.012	23.6	167	11.1	0.1	
[Pb]	207	He	0.014	33.6	156	17.5	0.1	
Pb	208	He	0.012	21.3	674	10.6	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	609757	1.68	604198	100.92	30	120	
Ge	72	He	88494	1.04	81288	108.87	30	120	
Ge	72	H2	1021339	1.47	933781	109.38	30	120	
In	115	He	796149	0.39	717634	110.94	30	120	
Lu	175	He	2267269	1.08	2064230	109.84	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	KQ1605097-02
Data File Name	013_LCS.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T09:37:34-07:00
Sample Type	LCS
Dilution	1
Comment	20
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	4.981	0.387	13804	1.44	5	99.6	
Ni	60	He	51.374	0.851	72060	0.33	50	102.7	
Ni	62	He	51.298	0.482	11406	0.79	50	102.6	
Cu	63	He	25.592	0.675	104632	0.54	25	102.4	
Cu	65	He	25.713	0.758	52824	0.68	25	102.9	
Zn	66	He	52.756	1.809	27393	2.14	50	105.5	
As	75	He	51.920	0.696	16921	0.71	50	103.8	
Se	77	H2	53.899	2.184	10267	1.06	50	107.8	
Se	78	H2	52.356	1.294	29965	1.07	50	104.7	
Sb	121	He	51.040	0.992	115034	0.71	50	102.1	
Sb	123	He	50.861	0.863	92694	0.53	50	101.7	
[Pb]	206	He	49.069	2.042	301684	0.75	50	98.1	
[Pb]	207	He	50.984	1.935	279225	0.72	50	102.0	
Pb	208	He	50.155	2.066	1263993	0.99	50	100.3	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	638442	1.75	604198	105.67	30	120	
Ge	72	He	88656	0.53	81288	109.06	30	120	
Ge	72	H2	1009761	1.02	933781	108.14	30	120	
In	115	He	821705	0.37	717634	114.50	30	120	
Lu	175	He	2318626	1.85	2064230	112.32	30	120	

All Reference Sample Report

Sample Table

Sample Name	K1604717-001
Data File Name	014_ARF.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T09:41:24-07:00
Sample Type	AllRef
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	2.324	1.45	5980	0.04	
Ni	60	He	19.700	0.35	26722	0.07	
Ni	62	He	20.745	4.75	4465	0.46	
Cu	63	He	41.451	0.99	163358	0.03	
Cu	65	He	41.207	1.20	81601	0.05	
Zn	66	He	123.192	1.06	61626	0.20	
As	75	He	9.652	0.83	3039	0.32	
Se	77	H2	1.733	10.29	983	0.18	
Se	78	H2	0.408	7.94	234	0.17	
Sb	121	He	0.543	2.15	1219	0.04	
Sb	123	He	0.565	1.83	1005	0.06	
[Pb]	206	He	99.048	0.84	582724	0.02	
[Pb]	207	He	96.423	1.05	505333	0.02	
Pb	208	He	97.634	0.96	2354547	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	591999	2.18	604198	97.98	30	120	
Ge	72	He	85496	0.97	81288	105.18	30	120	
Ge	72	H2	981125	1.56	933781	105.07	30	120	
In	115	He	763022	0.48	717634	106.32	30	120	
Lu	175	He	2218667	0.90	2064230	107.48	30	120	

Sample Report

Sample Table

Sample Name	K1604717-001L
Data File Name	015SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T09:45:11-07:00
Sample Type	Sample
Dilution	1
Comment	25
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	0.483	3.04	1248	0.04	
Ni	60	He	4.128	3.14	5721	0.07	
Ni	62	He	4.383	9.14	972	0.45	
Cu	63	He	8.588	0.66	34095	0.03	
Cu	65	He	8.547	0.40	17052	0.05	
Zn	66	He	25.353	4.19	12778	0.20	
As	75	He	1.959	11.30	625	0.31	
Se	77	H2	0.154	50.82	729	0.02	
Se	78	H2	0.059	10.76	41	0.14	
Sb	121	He	0.098	18.84	289	0.03	
Sb	123	He	0.104	15.00	226	0.05	
[Pb]	206	He	20.405	1.00	118465	0.02	
[Pb]	207	He	19.890	1.33	102856	0.02	
Pb	208	He	20.135	1.06	479137	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	588422	1.12	604198	97.39	30	120	
Ge	72	He	85907	0.38	81288	105.68	30	120	
Ge	72	H2	1006966	1.04	933781	107.84	30	120	
In	115	He	764719	1.02	717634	106.56	30	120	
Lu	175	He	2187884	0.74	2064230	105.99	30	120	

Post Digestion Spike Sample (PDS) Report

Sample Table

Sample Name	K1604717-001A
Data File Name	016_PDS.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T09:49:02-07:00
Sample Type	PDS
Dilution	1
Comment	5
QC Ref File Name	014_ARF.d
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Spk Amt	%Rec	QC Flag
Be	9	No Gas	53.312	0.826	136009	0.96	50	102	
Ni	60	He	68.441	0.924	93936	1.01	50	97	
Ni	62	He	69.036	2.410	15015	2.36	50	97	
Cu	63	He	90.096	0.536	360326	0.85	50	97	
Cu	65	He	90.775	0.999	182414	0.66	50	99	
Zn	66	He	170.663	1.146	86643	0.76	50	95	
As	75	He	59.168	1.608	18875	1.12	50	99	
Se	77	H2	51.689	1.505	9828	1.54	50	100	
Se	78	H2	49.293	1.560	28075	0.61	50	98	
Sb	121	He	50.040	0.972	105666	0.10	50	99	
Sb	123	He	49.707	1.321	84873	0.42	50	98	
[Pb]	206	He	149.976	0.988	883164	0.88	50	102	
[Pb]	207	He	148.049	1.355	776592	0.81	50	103	
Pb	208	He	148.393	0.573	3582136	1.19	50	102	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	588453	1.46	604198	97.39	30	120	
Ge	72	He	86787	0.51	81288	106.76	30	120	
Ge	72	H2	1004884	1.07	933781	107.61	30	120	
In	115	He	769879	0.99	717634	107.28	30	120	
Lu	175	He	2220982	1.76	2064230	107.59	30	120	

Matrix Spike Sample (MS) Report

Sample Table

Sample Name	K1604717-001S
Data File Name	017_Spk.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T09:52:51-07:00
Sample Type	Spike
Dilution	1
Comment	5
QC Ref File Name	014_ARF.d
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Spk Amt	%Rec	QC Flag
Be	9	No Gas	22.045	1.120	55354	0.58	20	99	
Ni	60	He	201.689	2.727	283517	1.22	200	91	
Ni	62	He	202.255	2.484	45035	1.23	200	91	
Cu	63	He	125.152	2.680	513029	1.11	100	84	
Cu	65	He	125.445	1.829	258414	0.28	100	84	
Zn	66	He	297.605	1.913	154860	0.53	200	87	
As	75	He	193.412	1.447	63242	0.28	200	92	
Se	77	H2	193.085	1.910	34714	0.62	200	96	
Se	78	H2	186.269	2.094	105822	0.76	200	93	
Sb	121	He	87.922	0.715	184749	0.21	200	44	Flag
Sb	123	He	87.369	1.501	148458	0.69	200	43	Flag
[Pb]	206	He	284.064	0.422	1703256	0.41	200	93	
[Pb]	207	He	280.200	1.025	1496593	0.50	200	92	
Pb	208	He	280.108	1.575	6884261	0.90	200	91	

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QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	579112	1.64	604198	95.85	30	120	
Ge	72	He	88987	1.55	81288	109.47	30	120	
Ge	72	H2	1002645	1.48	933781	107.37	30	120	
In	115	He	766353	0.82	717634	106.79	30	120	
Lu	175	He	2261366	0.73	2064230	109.55	30	120	

Matrix Spike Sample (MS) Report

Sample Table

Sample Name	K1604717-001SD
Data File Name	018_Spk.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T09:56:40-07:00
Sample Type	Spike
Dilution	1
Comment	5
QC Ref File Name	014_ARF.d
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Spk Amt	%Rec	QC Flag
Be	9	No Gas	22.841	2.484	58198	1.07	20	103	
Ni	60	He	210.288	0.565	294407	0.81	200	95	
Ni	62	He	212.632	1.256	47149	0.55	200	96	
Cu	63	He	130.944	0.591	534589	0.20	100	89	
Cu	65	He	130.454	0.970	267611	0.23	100	89	
Zn	66	He	304.972	1.021	158032	0.33	200	91	
As	75	He	201.708	1.234	65676	0.72	200	96	
Se	77	H2	200.314	2.837	36201	1.33	200	99	
Se	78	H2	193.872	0.879	110819	0.56	200	97	
Sb	121	He	92.130	1.157	195067	0.45	200	46	Flag
Sb	123	He	92.120	0.907	157735	0.17	200	46	Flag
[Pb]	206	He	290.471	0.187	1747744	1.00	200	96	
[Pb]	207	He	282.495	1.239	1514026	0.08	200	93	
Pb	208	He	284.367	1.353	7013043	0.35	200	93	

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QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	587812	2.73	604198	97.29	30	120	
Ge	72	He	88604	0.74	81288	109.00	30	120	
Ge	72	H2	1008693	1.43	933781	108.02	30	120	
In	115	He	772226	0.74	717634	107.61	30	120	
Lu	175	He	2269241	1.18	2064230	109.93	30	120	

Sample Report

Sample Table

Sample Name	K1604717-002
Data File Name	019SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T10:00:27-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	2.862	2.55	7349	0.04	
Ni	60	He	26.217	2.28	37375	0.07	
Ni	62	He	26.259	1.48	5941	0.44	
Cu	63	He	62.634	1.47	259698	0.02	
Cu	65	He	62.916	1.98	131076	0.05	
Zn	66	He	159.606	1.53	84000	0.19	
As	75	He	13.583	1.70	4497	0.30	
Se	77	H2	2.264	9.80	1103	0.21	
Se	78	H2	0.475	17.61	279	0.17	
Sb	121	He	1.050	1.21	2343	0.04	
Sb	123	He	1.017	2.86	1819	0.06	
[Pb]	206	He	161.453	2.02	968879	0.02	
[Pb]	207	He	157.856	1.67	843862	0.02	
Pb	208	He	160.666	1.49	3952265	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	591083	1.30	604198	97.83	30	120	
Ge	72	He	89973	1.20	81288	110.68	30	120	
Ge	72	H2	1007355	1.94	933781	107.88	30	120	
In	115	He	784229	0.35	717634	109.28	30	120	
Lu	175	He	2263321	0.79	2064230	109.64	30	120	

Sample Report

Sample Table

Sample Name	K1604717-003
Data File Name	020SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T10:04:16-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	4.625	2.29	11743	0.04	
Ni	60	He	75.086	1.08	106038	0.07	
Ni	62	He	75.442	0.57	16884	0.45	
Cu	63	He	93.639	1.32	385374	0.02	
Cu	65	He	94.262	0.79	194935	0.05	
Zn	66	He	242.892	0.48	126885	0.19	
As	75	He	20.420	1.71	6709	0.30	
Se	77	H2	4.369	9.69	1485	0.29	
Se	78	H2	0.846	2.91	494	0.17	
Sb	121	He	0.641	1.87	1462	0.04	
Sb	123	He	0.642	4.45	1165	0.06	
[Pb]	206	He	94.413	1.82	579320	0.02	
[Pb]	207	He	91.605	2.01	500700	0.02	
Pb	208	He	92.928	1.87	2337320	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	585023	1.98	604198	96.83	30	120	
Ge	72	He	89316	1.30	81288	109.88	30	120	
Ge	72	H2	1013554	0.72	933781	108.54	30	120	
In	115	He	783096	0.66	717634	109.12	30	120	
Lu	175	He	2314344	1.77	2064230	112.12	30	120	

Sample Report

Sample Table

Sample Name	K1604717-004
Data File Name	021SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T10:08:06-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	3.978	1.32	9993	0.04	
Ni	60	He	29.825	0.68	41613	0.07	
Ni	62	He	30.087	5.12	6657	0.45	
Cu	63	He	55.614	1.16	225741	0.02	
Cu	65	He	56.153	0.96	114533	0.05	
Zn	66	He	181.934	1.10	93727	0.19	
As	75	He	18.869	2.13	6112	0.31	
Se	77	H2	3.267	4.65	1266	0.26	
Se	78	H2	0.646	10.01	372	0.17	
Sb	121	He	0.783	0.97	1730	0.05	
Sb	123	He	0.850	5.04	1495	0.06	
[Pb]	206	He	67.407	2.77	407433	0.02	
[Pb]	207	He	65.030	1.62	350208	0.02	
Pb	208	He	65.883	2.33	1632485	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	578646	1.73	604198	95.77	30	120	
Ge	72	He	88074	1.16	81288	108.35	30	120	
Ge	72	H2	995900	1.36	933781	106.65	30	120	
In	115	He	766948	0.37	717634	106.87	30	120	
Lu	175	He	2280178	2.42	2064230	110.46	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	022_CCV.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T10:11:58-07:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	25.040	0.453	63197	1.11	25	100	
Ni	60	He	24.018	2.335	33014	2.18	25	96	
Ni	62	He	24.062	3.596	5250	3.97	25	96	
Cu	63	He	24.201	1.142	96794	2.18	25	97	
Cu	65	He	24.188	0.623	48621	3.01	25	97	
Zn	66	He	23.985	2.902	12212	5.27	25	96	
As	75	He	24.680	1.618	7873	3.55	25	99	
Se	77	H2	24.747	2.031	4917	2.73	25	99	
Se	78	H2	24.220	1.813	13380	1.09	25	97	
Sb	121	He	25.177	0.765	52232	3.47	25	101	
Sb	123	He	24.945	1.924	41818	0.93	25	100	
[Pb]	206	He	24.484	0.243	141792	2.78	25	98	
[Pb]	207	He	24.820	0.213	128035	2.66	25	99	
Pb	208	He	24.537	0.292	582450	2.71	25	98	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	582022	0.81	604198	96.33	30	120	
Ge	72	He	86729	2.39	81288	106.69	30	120	
Ge	72	H2	974430	1.33	933781	104.35	30	120	
In	115	He	755638	2.83	717634	105.30	30	120	
Lu	175	He	2182851	2.87	2064230	105.75	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	023_CCB.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T10:15:46-07:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	0.002	56.5	22	11.6	0.04	
Ni	60	He	0.005	477.7	130	26.8	0.2	
Ni	62	He	0.055	80.5	43	23.1	0.2	
Cu	63	He	0.001	531.0	112	18.9	0.2	
Cu	65	He	0.009	182.8	74	46.6	0.2	
Zn	66	He	0.056	54.1	73	20.8	1	
As	75	He	-0.005	-66.8	5	20.0	0.25	
Se	77	H2	-0.114	-64.5	693	2.5	20	
Se	78	H2	0.000	-4935.0	8	45.1	0.5	
Sb	121	He	0.000	-11738.1	86	28.1	0.2	
Sb	123	He	0.016	45.9	79	17.2	0.05	
[Pb]	206	He	0.005	60.9	123	14.3	0.1	
[Pb]	207	He	0.013	11.3	144	5.3	0.1	
Pb	208	He	0.007	34.6	549	11.5	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	591923	1.87	604198	97.97	30	120	
Ge	72	He	88039	0.66	81288	108.30	30	120	
Ge	72	H2	1022877	0.90	933781	109.54	30	120	
In	115	He	787480	1.11	717634	109.73	30	120	
Lu	175	He	2254495	0.15	2064230	109.22	30	120	

Sample Report

Sample Table

Sample Name	K1604717-005
Data File Name	024SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T10:19:37-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	3.297	1.67	8553	0.04	
Ni	60	He	29.167	3.69	42384	0.07	
Ni	62	He	29.942	1.83	6903	0.43	
Cu	63	He	32.272	0.90	136511	0.02	
Cu	65	He	32.759	0.67	69631	0.05	
Zn	66	He	160.162	0.63	85964	0.19	
As	75	He	16.536	1.33	5582	0.30	
Se	77	H2	2.311	4.40	1153	0.20	
Se	78	H2	0.504	6.36	306	0.16	
Sb	121	He	0.516	6.20	1229	0.04	
Sb	123	He	0.529	3.25	997	0.05	
[Pb]	206	He	45.243	0.80	279113	0.02	
[Pb]	207	He	43.710	0.66	240214	0.02	
Pb	208	He	44.571	1.26	1127081	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	597410	1.93	604198	98.88	30	120	
Ge	72	He	91751	1.12	81288	112.87	30	120	
Ge	72	H2	1044896	1.24	933781	111.90	30	120	
In	115	He	806020	0.55	717634	112.32	30	120	
Lu	175	He	2326159	1.71	2064230	112.69	30	120	

Sample Report

Sample Table

Sample Name	K1604717-006
Data File Name	025SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T10:23:26-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	3.491	1.40	9023	0.04	
Ni	60	He	29.932	2.64	43244	0.07	
Ni	62	He	29.967	2.47	6869	0.44	
Cu	63	He	60.443	1.77	254087	0.02	
Cu	65	He	61.193	1.07	129270	0.05	
Zn	66	He	209.998	1.94	112035	0.19	
As	75	He	20.959	1.18	7032	0.30	
Se	77	H2	3.067	7.21	1286	0.24	
Se	78	H2	0.766	8.76	460	0.17	
Sb	121	He	0.889	4.08	1999	0.04	
Sb	123	He	0.849	3.04	1528	0.06	
[Pb]	206	He	90.120	1.54	544881	0.02	
[Pb]	207	He	87.408	1.88	470767	0.02	
Pb	208	He	88.748	1.48	2199510	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	595159	1.75	604198	98.50	30	120	
Ge	72	He	91226	1.67	81288	112.23	30	120	
Ge	72	H2	1040636	0.45	933781	111.44	30	120	
In	115	He	785352	0.88	717634	109.44	30	120	
Lu	175	He	2280174	0.95	2064230	110.46	30	120	

Sample Report

Sample Table

Sample Name	K1604717-007
Data File Name	026SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T10:27:16-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	3.255	4.25	8288	0.04	
Ni	60	He	29.826	2.97	41807	0.07	
Ni	62	He	30.044	2.05	6681	0.45	
Cu	63	He	47.850	1.40	195214	0.02	
Cu	65	He	47.632	2.42	97631	0.05	
Zn	66	He	168.988	2.45	87483	0.19	
As	75	He	18.250	1.78	5942	0.31	
Se	77	H2	3.036	4.31	1235	0.25	
Se	78	H2	0.732	6.95	424	0.17	
Sb	121	He	0.577	2.96	1320	0.04	
Sb	123	He	0.621	2.58	1126	0.06	
[Pb]	206	He	69.394	0.48	415303	0.02	
[Pb]	207	He	67.496	0.72	359818	0.02	
Pb	208	He	68.393	0.52	1677762	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	586499	2.56	604198	97.07	30	120	
Ge	72	He	88526	2.26	81288	108.90	30	120	
Ge	72	H2	1003425	1.96	933781	107.46	30	120	
In	115	He	780633	0.23	717634	108.78	30	120	
Lu	175	He	2256659	0.65	2064230	109.32	30	120	

Sample Report

Sample Table

Sample Name	K1604717-008
Data File Name	027SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T10:31:05-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	2.930	2.56	7546	0.04	
Ni	60	He	11.395	6.88	16642	0.07	
Ni	62	He	10.990	6.36	2555	0.43	
Cu	63	He	13.395	6.71	56734	0.02	
Cu	65	He	13.408	6.56	28524	0.05	
Zn	66	He	265.622	6.97	142500	0.19	
As	75	He	12.163	6.51	4107	0.30	
Se	77	H2	2.823	4.13	1218	0.23	
Se	78	H2	0.440	7.50	263	0.17	
Sb	121	He	0.492	3.97	1147	0.04	
Sb	123	He	0.503	5.10	926	0.05	
[Pb]	206	He	37.102	1.38	227251	0.02	
[Pb]	207	He	36.149	1.29	197268	0.02	
Pb	208	He	36.752	1.14	922868	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	592875	2.06	604198	98.13	30	120	
Ge	72	He	91799	3.94	81288	112.93	30	120	
Ge	72	H2	1020422	0.82	933781	109.28	30	120	
In	115	He	785137	4.79	717634	109.41	30	120	
Lu	175	He	2309640	6.08	2064230	111.89	30	120	

Sample Report

Sample Table

Sample Name	K1604717-009
Data File Name	028SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T10:34:53-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	3.246	2.69	8172	0.04	
Ni	60	He	12.159	2.10	17205	0.07	
Ni	62	He	12.360	5.55	2780	0.44	
Cu	63	He	15.072	1.64	61872	0.02	
Cu	65	He	15.173	1.58	31297	0.05	
Zn	66	He	221.743	2.33	115361	0.19	
As	75	He	14.013	1.64	4587	0.31	
Se	77	H2	4.251	18.58	1177	0.36	
Se	78	H2	0.550	9.70	261	0.21	
Sb	121	He	0.328	2.13	785	0.04	
Sb	123	He	0.335	1.94	627	0.05	
[Pb]	206	He	34.619	1.77	207921	0.02	
[Pb]	207	He	33.035	1.40	176740	0.02	
Pb	208	He	33.933	1.48	835380	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	579750	1.59	604198	95.95	30	120	
Ge	72	He	88958	1.31	81288	109.44	30	120	
Ge	72	H2	820030	10.23	933781	87.82	30	120	
In	115	He	777523	0.46	717634	108.35	30	120	
Lu	175	He	2264490	1.61	2064230	109.70	30	120	

Sample Report

Sample Table

Sample Name	K1604717-010
Data File Name	029SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T10:38:42-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	3.061	1.22	7700	0.04	
Ni	60	He	28.190	2.13	40437	0.07	
Ni	62	He	27.495	0.52	6258	0.44	
Cu	63	He	68.134	1.79	284267	0.02	
Cu	65	He	68.589	1.99	143789	0.05	
Zn	66	He	194.794	2.26	103149	0.19	
As	75	He	26.130	2.05	8699	0.30	
Se	77	H2	3.428	6.32	1334	0.26	
Se	78	H2	0.667	10.39	396	0.17	
Sb	121	He	0.938	4.35	2091	0.04	
Sb	123	He	0.877	3.36	1566	0.06	
[Pb]	206	He	103.608	0.29	628781	0.02	
[Pb]	207	He	99.793	1.02	539453	0.02	
Pb	208	He	101.545	0.74	2525994	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	579079	1.69	604198	95.84	30	120	
Ge	72	He	90537	0.99	81288	111.38	30	120	
Ge	72	H2	1026266	1.51	933781	109.90	30	120	
In	115	He	779965	0.84	717634	108.69	30	120	
Lu	175	He	2288630	1.61	2064230	110.87	30	120	

Sample Report

Sample Table

Sample Name	K1604717-011
Data File Name	030SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T10:42:31-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	3.955	1.02	10333	0.04	
Ni	60	He	36.597	0.86	54025	0.07	
Ni	62	He	36.006	2.55	8429	0.43	
Cu	63	He	53.851	0.17	231435	0.02	
Cu	65	He	54.683	0.18	118088	0.05	
Zn	66	He	224.813	1.49	122604	0.18	
As	75	He	35.967	1.55	12330	0.29	
Se	77	H2	2.619	1.54	1221	0.21	
Se	78	H2	0.588	5.13	360	0.16	
Sb	121	He	0.946	1.87	2183	0.04	
Sb	123	He	0.933	0.40	1723	0.05	
[Pb]	206	He	90.476	1.56	557716	0.02	
[Pb]	207	He	85.306	1.85	468411	0.02	
Pb	208	He	88.046	1.45	2224753	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	601585	1.66	604198	99.57	30	120	
Ge	72	He	93243	0.73	81288	114.71	30	120	
Ge	72	H2	1054766	1.19	933781	112.96	30	120	
In	115	He	808021	0.27	717634	112.60	30	120	
Lu	175	He	2324830	1.46	2064230	112.62	30	120	

Sample Report

Sample Table

Sample Name	K1604717-012
Data File Name	031SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-0S-26T10:46:20-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	1.730	4.09	4306	0.04	
Ni	60	He	16.847	16.08	20869	0.08	
Ni	62	He	16.806	11.78	3320	0.51	
Cu	63	He	27.135	16.89	97549	0.03	
Cu	65	He	27.159	16.17	49094	0.06	
Zn	66	He	77.103	15.99	35216	0.22	
As	75	He	13.625	14.34	3918	0.35	
Se	77	H2	3.846	7.21	1359	0.28	
Se	78	H2	0.437	3.71	253	0.17	
Sb	121	He	0.341	8.85	721	0.05	
Sb	123	He	0.388	23.52	628	0.06	
[Pb]	206	He	34.445	13.91	185923	0.02	
[Pb]	207	He	33.360	14.54	160315	0.02	
Pb	208	He	33.804	14.47	747578	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	572036	1.82	604198	94.68	30	120	
Ge	72	He	79169	13.60	81288	97.39	30	120	
Ge	72	H2	990513	1.83	933781	106.08	30	120	
In	115	He	695276	14.83	717634	96.88	30	120	
Lu	175	He	2059003	12.68	2064230	99.75	30	120	

Sample Report

Sample Table

Sample Name	K1604717-013
Data File Name	032SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T10:50:10-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	1.984	2.57	4983	0.04	
Ni	60	He	20.047	1.69	28008	0.07	
Ni	62	He	20.860	1.71	4626	0.45	
Cu	63	He	34.765	1.69	141156	0.02	
Cu	65	He	35.016	1.52	71439	0.05	
Zn	66	He	89.063	1.18	45908	0.19	
As	75	He	20.103	2.17	6512	0.31	
Se	77	H2	3.716	12.41	1356	0.27	
Se	78	H2	0.441	7.81	259	0.17	
Sb	121	He	1.033	5.12	2253	0.05	
Sb	123	He	1.003	3.40	1752	0.06	
[Pb]	206	He	91.162	0.48	555556	0.02	
[Pb]	207	He	86.574	0.81	469969	0.02	
Pb	208	He	88.268	0.75	2204919	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	577565	2.44	604198	95.59	30	120	
Ge	72	He	88077	1.23	81288	108.35	30	120	
Ge	72	H2	1003837	1.19	933781	107.50	30	120	
In	115	He	766041	0.45	717634	106.75	30	120	
Lu	175	He	2298107	1.20	2064230	111.33	30	120	

Sample Report

Sample Table

Sample Name	K1604717-014
Data File Name	033SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T10:54:00-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	2.214	2.51	5709	0.04	
Ni	60	He	19.909	1.18	28246	0.07	
Ni	62	He	19.884	0.73	4480	0.44	
Cu	63	He	30.946	0.50	127617	0.02	
Cu	65	He	31.012	1.41	64260	0.05	
Zn	66	He	115.579	0.98	60485	0.19	
As	75	He	14.979	1.41	4929	0.30	
Se	77	H2	2.764	4.82	1201	0.23	
Se	78	H2	0.341	11.29	204	0.17	
Sb	121	He	0.554	7.33	1277	0.04	
Sb	123	He	0.543	5.08	995	0.05	
[Pb]	206	He	53.441	1.49	329297	0.02	
[Pb]	207	He	51.531	0.78	282863	0.02	
Pb	208	He	52.483	1.29	1325660	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	593200	1.62	604198	98.18	30	120	
Ge	72	He	89438	0.68	81288	110.03	30	120	
Ge	72	H2	1015417	1.39	933781	108.74	30	120	
In	115	He	784512	0.55	717634	109.32	30	120	
Lu	175	He	2323507	0.76	2064230	112.56	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	034_CCV.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T10:57:50-07:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	24.868	2.596	62667	0.64	25	99	
Ni	60	He	25.452	2.314	35768	0.53	25	102	
Ni	62	He	25.362	4.229	5654	1.85	25	101	
Cu	63	He	25.280	2.475	103370	0.48	25	101	
Cu	65	He	25.534	2.586	52464	0.62	25	102	
Zn	66	He	25.908	5.238	13471	3.00	25	104	
As	75	He	25.897	2.646	8445	1.88	25	104	
Se	77	H2	25.345	2.606	5341	3.13	25	101	
Se	78	H2	25.111	1.553	14759	0.50	25	100	
Sb	121	He	25.576	3.110	55849	0.44	25	102	
Sb	123	He	25.542	2.272	45098	0.82	25	102	
[Pb]	206	He	24.630	4.166	149733	0.47	25	99	
[Pb]	207	He	24.888	4.912	134744	1.10	25	100	
Pb	208	He	24.846	4.369	619086	0.58	25	99	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	581387	2.56	604198	96.22	30	120	
Ge	72	He	88702	2.43	81288	109.12	30	120	
Ge	72	H2	1036712	1.17	933781	111.02	30	120	
In	115	He	795966	3.04	717634	110.92	30	120	
Lu	175	He	2294106	4.36	2064230	111.14	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	035_CCB.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T11:01:39-07:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	0.003	27.9	25	8.4	0.04	
Ni	60	He	0.015	104.9	144	14.8	0.2	
Ni	62	He	0.039	166.7	40	36.3	0.2	
Cu	63	He	0.007	142.5	137	29.6	0.2	
Cu	65	He	0.008	118.9	71	25.8	0.2	
Zn	66	He	0.054	31.9	72	11.6	1	
As	75	He	-0.002	-838.6	6	72.6	0.25	
Se	77	H2	-0.201	-100.6	677	5.0	20	
Se	78	H2	0.004	165.3	10	36.6	0.5	
Sb	121	He	0.004	102.4	97	9.6	0.2	
Sb	123	He	0.016	26.7	81	9.3	0.05	
[Pb]	206	He	0.007	100.2	141	31.2	0.1	
[Pb]	207	He	0.008	119.7	121	40.6	0.1	
Pb	208	He	0.008	44.6	572	15.0	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	599656	1.32	604198	99.25	30	120	
Ge	72	He	88259	1.17	81288	108.58	30	120	
Ge	72	H2	1022494	0.52	933781	109.50	30	120	
In	115	He	799974	0.33	717634	111.47	30	120	
Lu	175	He	2308434	0.69	2064230	111.83	30	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLCCVS
Data File Name	036LCCV.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T11:05:30-07:00
Sample Type	LLCCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	0.042	14.666	125	13.67	0.04	105	
Ni	60	He	0.403	17.132	682	13.49	0.4	101	
Ni	62	He	0.499	25.637	141	20.64	0.4	125	
Cu	63	He	0.201	5.291	922	4.11	0.2	100	
Cu	65	He	0.229	7.947	521	6.57	0.2	114	
Zn	66	He	1.079	11.215	600	10.93	1	108	
As	75	He	0.990	2.241	327	2.84	1	99	
Se	77	H2	1.935	7.205	1059	0.41	2	97	
Se	78	H2	1.955	2.290	1139	0.77	2	98	
Sb	121	He	0.106	16.772	315	12.60	0.1	106	
Sb	123	He	0.120	5.730	261	4.26	0.1	120	
[Pb]	206	He	0.099	0.852	690	0.48	0.1	99	
[Pb]	207	He	0.100	16.950	616	15.17	0.1	100	
Pb	208	He	0.102	3.674	2876	2.48	0.1	102	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	594707	2.34	604198	98.43	30	120	
Ge	72	He	87994	0.64	81288	108.25	30	120	
Ge	72	H2	1021267	2.05	933781	109.37	30	120	
In	115	He	786852	0.59	717634	109.65	30	120	
Lu	175	He	2270542	1.04	2064230	109.99	30	120	

Sample Report

Sample Table

Sample Name	K1604717-015
Data File Name	037SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T11:09:21-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	1.925	2.60	4849	0.04	
Ni	60	He	27.401	2.72	38169	0.07	
Ni	62	He	27.981	3.94	6184	0.45	
Cu	63	He	61.437	2.09	248925	0.02	
Cu	65	He	62.224	1.92	126685	0.05	
Zn	66	He	201.490	1.95	103617	0.19	
As	75	He	27.772	1.10	8979	0.31	
Se	77	H2	1.294	7.11	933	0.14	
Se	78	H2	0.377	6.28	224	0.17	
Sb	121	He	3.118	1.88	6687	0.05	
Sb	123	He	3.115	3.42	5385	0.06	
[Pb]	206	He	152.255	1.47	922413	0.02	
[Pb]	207	He	147.991	2.41	798588	0.02	
Pb	208	He	151.624	2.26	3765101	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	579209	1.12	604198	95.86	30	120	
Ge	72	He	87932	1.73	81288	108.17	30	120	
Ge	72	H2	1009176	1.71	933781	108.07	30	120	
In	115	He	772725	0.81	717634	107.68	30	120	
Lu	175	He	2285146	1.90	2064230	110.70	30	120	

Sample Report

Sample Table

Sample Name	K1604717-016
Data File Name	038SMPL.d
Data Path Name	D:\Data\Experiments\0S2616A1.b
Acq Date Time	2016-05-26T11:13:14-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	2.154	2.66	5387	0.04	
Ni	60	He	67.104	2.78	91587	0.07	
Ni	62	He	69.230	3.11	14973	0.46	
Cu	63	He	44.650	2.15	177641	0.03	
Cu	65	He	44.817	3.20	89581	0.05	
Zn	66	He	237.831	2.25	120063	0.20	
As	75	He	16.824	2.81	5342	0.31	
Se	77	H2	1.641	8.37	960	0.17	
Se	78	H2	0.310	8.09	179	0.17	
Sb	121	He	1.814	1.57	3857	0.05	
Sb	123	He	1.866	1.24	3188	0.06	
[Pb]	206	He	42.499	0.99	251381	0.02	
[Pb]	207	He	40.546	1.11	213633	0.02	
Pb	208	He	41.734	0.71	1011890	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	575140	0.55	604198	95.19	30	120	
Ge	72	He	86341	2.60	81288	106.22	30	120	
Ge	72	H2	973837	1.47	933781	104.29	30	120	
In	115	He	758965	1.09	717634	105.76	30	120	
Lu	175	He	2230116	0.82	2064230	108.04	30	120	

Sample Report

Sample Table

Sample Name	K1604717-017
Data File Name	039SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T11:17:04-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	1.792	1.95	4686	0.04	
Ni	60	He	51.997	1.22	73729	0.07	
Ni	62	He	51.949	2.79	11676	0.44	
Cu	63	He	37.782	1.07	156104	0.02	
Cu	65	He	37.579	0.86	78020	0.05	
Zn	66	He	214.663	1.43	112533	0.19	
As	75	He	15.402	2.32	5079	0.30	
Se	77	H2	1.325	16.76	951	0.14	
Se	78	H2	0.252	1.79	154	0.16	
Sb	121	He	0.331	4.62	809	0.04	
Sb	123	He	0.366	5.56	698	0.05	
[Pb]	206	He	50.731	2.04	313456	0.02	
[Pb]	207	He	49.734	2.73	273715	0.02	
Pb	208	He	50.468	2.47	1278144	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	600982	0.87	604198	99.47	30	120	
Ge	72	He	89625	0.45	81288	110.26	30	120	
Ge	72	H2	1022980	1.13	933781	109.55	30	120	
In	115	He	796572	0.55	717634	111.00	30	120	
Lu	175	He	2330342	2.18	2064230	112.89	30	120	

Sample Report

Sample Table

Sample Name	K1604717-018
Data File Name	040SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T11:20:54-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	2.410	3.11	6218	0.04	
Ni	60	He	59.734	0.61	85135	0.07	
Ni	62	He	60.162	2.25	13589	0.44	
Cu	63	He	44.557	1.08	185057	0.02	
Cu	65	He	44.513	1.52	92897	0.05	
Zn	66	He	247.553	1.52	130457	0.19	
As	75	He	18.734	0.23	6209	0.30	
Se	77	H2	1.875	11.17	1056	0.18	
Se	78	H2	0.351	10.55	213	0.16	
Sb	121	He	0.435	4.36	1044	0.04	
Sb	123	He	0.455	6.65	859	0.05	
[Pb]	206	He	67.561	2.02	420307	0.02	
[Pb]	207	He	65.905	1.40	365256	0.02	
Pb	208	He	66.872	1.38	1705412	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	593796	1.31	604198	98.28	30	120	
Ge	72	He	90107	1.22	81288	110.85	30	120	
Ge	72	H2	1028218	1.72	933781	110.11	30	120	
In	115	He	802032	0.85	717634	111.76	30	120	
Lu	175	He	2346160	1.24	2064230	113.66	30	120	

Sample Report

Sample Table

Sample Name	K1604717-019
Data File Name	041SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T11:24:44-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	1.761	1.98	4573	0.04	
Ni	60	He	67.422	3.41	95946	0.07	
Ni	62	He	67.903	1.60	15318	0.44	
Cu	63	He	48.154	2.06	199767	0.02	
Cu	65	He	49.047	2.70	102230	0.05	
Zn	66	He	265.214	2.19	139611	0.19	
As	75	He	19.326	3.47	6397	0.30	
Se	77	H2	1.591	26.48	1002	0.16	
Se	78	H2	0.325	10.72	197	0.17	
Sb	121	He	0.621	3.28	1438	0.04	
Sb	123	He	0.616	6.22	1133	0.05	
[Pb]	206	He	67.183	0.25	415095	0.02	
[Pb]	207	He	67.744	0.75	372842	0.02	
Pb	208	He	67.641	0.63	1713089	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	596961	1.78	604198	98.80	30	120	
Ge	72	He	90030	2.39	81288	110.76	30	120	
Ge	72	H2	1024980	0.94	933781	109.77	30	120	
In	115	He	793181	0.69	717634	110.53	30	120	
Lu	175	He	2329767	0.56	2064230	112.86	30	120	

Sample Report

Sample Table

Sample Name	K1604717-020
Data File Name	042SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T11:28:34-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	2.098	1.29	5249	0.04	
Ni	60	He	23.899	1.29	32859	0.07	
Ni	62	He	23.920	1.40	5220	0.46	
Cu	63	He	47.620	1.86	190359	0.03	
Cu	65	He	48.217	2.14	96850	0.05	
Zn	66	He	95.511	1.70	48479	0.20	
As	75	He	20.542	1.03	6553	0.31	
Se	77	H2	3.602	3.76	1307	0.28	
Se	78	H2	0.461	5.75	264	0.17	
Sb	121	He	1.022	2.36	2268	0.05	
Sb	123	He	1.057	3.24	1875	0.06	
[Pb]	206	He	102.413	1.27	625731	0.02	
[Pb]	207	He	98.035	1.37	533571	0.02	
Pb	208	He	99.548	1.32	2493164	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	575278	1.23	604198	95.21	30	120	
Ge	72	He	86730	0.76	81288	106.70	30	120	
Ge	72	H2	982755	1.53	933781	105.24	30	120	
In	115	He	778879	0.10	717634	108.53	30	120	
Lu	175	He	2304033	0.53	2064230	111.62	30	120	

Prep Blank (PB) Report

Sample Table

Sample Name	KQ1605151-01
Data File Name	043_PB.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T11:32:23-07:00
Sample Type	PB
Dilution	1
Comment	5
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	-0.001	-314.1	16	35.2	0.04	
Ni	60	He	0.043	25.5	191	8.1	0.2	
Ni	62	He	0.002	2358.0	33	40.0	0.2	
Cu	63	He	0.052	12.8	333	7.9	0.2	
Cu	65	He	0.038	18.9	139	11.8	0.2	
Zn	66	He	0.250	21.4	181	14.9	1	
As	75	He	-0.006	-100.4	5	44.6	0.25	
Se	77	H2	0.089	219.7	747	7.4	2	
Se	78	H2	-0.007	-85.6	4	81.0	0.5	
Sb	121	He	-0.020	-13.8	44	15.2	0.1	
Sb	123	He	-0.012	-60.0	31	43.0	0.05	
[Pb]	206	He	0.028	9.3	274	5.1	0.1	
[Pb]	207	He	0.033	11.1	268	7.6	0.1	
Pb	208	He	0.027	6.8	1094	3.7	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	622420	1.49	604198	103.02	30	120	
Ge	72	He	92227	0.99	81288	113.46	30	120	
Ge	72	H2	1047095	2.53	933781	112.13	30	120	
In	115	He	821604	0.93	717634	114.49	30	120	
Lu	175	He	2375372	1.02	2064230	115.07	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	KQ1605151-02
Data File Name	044_LCS.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T11:36:13-07:00
Sample Type	LCS
Dilution	1
Comment	20
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	4.957	2.481	13879	1.36	5	99.1	
Ni	60	He	49.462	0.450	72950	1.07	50	98.9	
Ni	62	He	50.012	2.454	11693	2.82	50	100.0	
Cu	63	He	24.919	0.646	107118	0.33	25	99.7	
Cu	65	He	25.032	1.016	54069	0.42	25	100.1	
Zn	66	He	50.279	0.814	27449	0.49	50	100.6	
As	75	He	50.593	0.475	17335	0.34	50	101.2	
Se	77	H2	51.765	2.753	10165	0.83	50	103.5	
Se	78	H2	50.780	3.157	29873	0.97	50	101.6	
Sb	121	He	49.577	0.677	115326	1.05	50	99.2	
Sb	123	He	49.846	1.228	93756	0.72	50	99.7	
[Pb]	206	He	46.862	0.885	299687	0.78	50	93.7	
[Pb]	207	He	48.757	1.102	277742	0.55	50	97.5	
Pb	208	He	47.717	0.661	1250842	0.43	50	95.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	645109	1.45	604198	106.77	30	120	
Ge	72	He	93211	0.62	81288	114.67	30	120	
Ge	72	H2	1038295	2.25	933781	111.19	30	120	
In	115	He	848051	0.65	717634	118.17	30	120	
Lu	175	He	2411196	0.74	2064230	116.81	30	120	

All Reference Sample Report

Sample Table

Sample Name	K1604717-021
Data File Name	045_ARF.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T11:40:01-07:00
Sample Type	AllRef
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	2.471	1.79	6448	0.04	
Ni	60	He	32.141	2.47	44455	0.07	
Ni	62	He	31.497	3.24	6910	0.46	
Cu	63	He	31.187	1.96	125582	0.02	
Cu	65	He	31.329	1.53	63391	0.05	
Zn	66	He	176.581	1.55	90213	0.20	
As	75	He	13.499	4.08	4338	0.31	
Se	77	H2	2.394	11.04	1098	0.22	
Se	78	H2	0.372	6.87	215	0.17	
Sb	121	He	0.354	6.73	813	0.04	
Sb	123	He	0.347	5.83	629	0.06	
[Pb]	206	He	38.450	1.83	226935	0.02	
[Pb]	207	He	37.209	1.80	195635	0.02	
Pb	208	He	37.900	1.74	916941	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	600513	1.76	604198	99.39	30	120	
Ge	72	He	87339	0.70	81288	107.44	30	120	
Ge	72	H2	981977	1.11	933781	105.16	30	120	
In	115	He	754042	1.14	717634	105.07	30	120	
Lu	175	He	2225464	1.32	2064230	107.81	30	120	

Sample Report

Sample Table

Sample Name	K1604717-021L
Data File Name	046SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T11:43:51-07:00
Sample Type	Sample
Dilution	1
Comment	25
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	0.502	2.44	1318	0.04	
Ni	60	He	6.574	1.83	9598	0.07	
Ni	62	He	6.448	2.75	1503	0.43	
Cu	63	He	6.564	1.35	27696	0.02	
Cu	65	He	6.741	3.86	14292	0.05	
Zn	66	He	35.117	2.17	18777	0.19	
As	75	He	2.644	4.53	893	0.30	
Se	77	H2	0.552	57.51	834	0.07	
Se	78	H2	0.067	15.64	48	0.14	
Sb	121	He	0.052	12.10	200	0.03	
Sb	123	He	0.075	13.96	182	0.04	
[Pb]	206	He	7.647	0.43	47564	0.02	
[Pb]	207	He	7.328	2.48	40585	0.02	
Pb	208	He	7.495	2.32	191034	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	598290	1.27	604198	99.02	30	120	
Ge	72	He	91222	0.22	81288	112.22	30	120	
Ge	72	H2	1051078	1.03	933781	112.56	30	120	
In	115	He	791270	0.48	717634	110.26	30	120	
Lu	175	He	2341182	2.32	2064230	113.42	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	047_CCV.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T11:47:42-07:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	25.099	1.942	64829	1.31	25	100	
Ni	60	He	24.735	1.688	35191	1.72	25	99	
Ni	62	He	24.134	3.269	5450	3.34	25	97	
Cu	63	He	24.475	1.125	101310	0.35	25	98	
Cu	65	He	24.803	1.121	51590	0.40	25	99	
Zn	66	He	24.786	1.555	13053	0.70	25	99	
As	75	He	24.974	2.140	8243	1.48	25	100	
Se	77	H2	25.318	4.074	5326	3.25	25	101	
Se	78	H2	24.718	1.978	14503	1.73	25	99	
Sb	121	He	25.203	0.951	54780	0.33	25	101	
Sb	123	He	25.304	0.389	44464	0.74	25	101	
[Pb]	206	He	24.311	1.113	148220	0.62	25	97	
[Pb]	207	He	24.168	1.693	131246	0.75	25	97	
Pb	208	He	24.240	1.804	605741	0.64	25	97	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	595702	0.63	604198	98.59	30	120	
Ge	72	He	89761	0.86	81288	110.42	30	120	
Ge	72	H2	1034925	1.37	933781	110.83	30	120	
In	115	He	791814	0.62	717634	110.34	30	120	
Lu	175	He	2298171	1.39	2064230	111.33	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	048_CCB.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T11:52:01-07:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	0.003	65.4	25	24.1	0.04	
Ni	60	He	0.015	94.2	144	10.9	0.2	
Ni	62	He	-0.037	-140.7	23	49.5	0.2	
Cu	63	He	0.009	31.4	146	10.3	0.2	
Cu	65	He	0.009	73.7	76	20.8	0.2	
Zn	66	He	0.018	230.2	54	39.4	1	
As	75	He	0.001	1275.0	7	71.4	0.25	
Se	77	H2	-0.122	-42.8	693	2.3	20	
Se	78	H2	-0.004	-141.5	6	50.0	0.5	
Sb	121	He	0.000	-1018.5	86	9.9	0.2	
Sb	123	He	0.008	38.2	64	8.3	0.05	
[Pb]	206	He	0.003	67.4	116	9.3	0.1	
[Pb]	207	He	0.008	58.4	126	22.6	0.1	
Pb	208	He	0.005	16.6	513	5.5	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	594840	2.16	604198	98.45	30	120	
Ge	72	He	89200	2.65	81288	109.73	30	120	
Ge	72	H2	1025430	1.04	933781	109.81	30	120	
In	115	He	791589	0.45	717634	110.31	30	120	
Lu	175	He	2319253	2.08	2064230	112.35	30	120	

Sample Report

Sample Table

Sample Name	LRSTD
Data File Name	049SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T11:57:14-07:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	498.800	1.17	1295232	0.04	
Ni	60	He	495.637	1.34	691761	0.07	
Ni	62	He	500.248	0.86	110577	0.45	
Cu	63	He	512.828	1.53	2087409	0.02	
Cu	65	He	497.710	1.91	1017964	0.05	
Zn	66	He	491.140	1.48	253762	0.19	
As	75	He	490.006	1.04	159095	0.31	
Se	77	H2	492.232	2.80	87589	0.56	
Se	78	H2	479.976	2.36	273245	0.18	
Sb	121	He	484.993	0.23	1050736	0.05	
Sb	123	He	479.926	0.71	840932	0.06	
[Pb]	206	He	509.095	0.79	3104736	0.02	
[Pb]	207	He	495.843	0.67	2693634	0.02	
Pb	208	He	490.701	0.80	12266557	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	598948	1.09	604198	99.13	30	120	
Ge	72	He	88359	1.03	81288	108.70	30	120	
Ge	72	H2	1005024	2.94	933781	107.63	30	120	
In	115	He	790407	0.09	717634	110.14	30	120	
Lu	175	He	2300021	0.60	2064230	111.42	30	120	

Post Digestion Spike Sample (PDS) Report

Sample Table

Sample Name	K1604717-021A
Data File Name	050_PDS.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T12:00:58-07:00
Sample Type	PDS
Dilution	1
Comment	5
QC Ref File Name	045_ARF.d
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Spk Amt	%Rec	QC Flag
Be	9	No Gas	54.857	1.218	138772	0.73	50	105	
Ni	60	He	78.598	0.918	111563	0.58	50	93	
Ni	62	He	79.002	0.404	17770	1.36	50	95	
Cu	63	He	77.378	0.958	320101	0.38	50	92	
Cu	65	He	78.016	1.094	162173	1.05	50	93	
Zn	66	He	219.465	1.805	115228	0.95	50	86	
As	75	He	61.920	1.537	20431	0.50	50	97	
Se	77	H2	51.483	0.639	9870	0.82	50	98	
Se	78	H2	49.276	1.745	28290	0.85	50	98	
Sb	121	He	50.721	0.711	108187	0.25	50	101	
Sb	123	He	50.653	1.506	87365	1.48	50	101	
[Pb]	206	He	83.922	1.338	509816	0.37	50	91	
[Pb]	207	He	82.964	1.022	448968	0.27	50	92	
Pb	208	He	83.673	1.061	2083623	0.27	50	92	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	583487	0.61	604198	96.57	30	120	
Ge	72	He	89772	1.11	81288	110.44	30	120	
Ge	72	H2	1012968	1.40	933781	108.48	30	120	
In	115	He	777643	0.53	717634	108.36	30	120	
Lu	175	He	2291017	1.29	2064230	110.99	30	120	

Matrix Spike Sample (MS) Report

Sample Table

Sample Name	K1604717-021S
Data File Name	051_Spk.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T12:04:47-07:00
Sample Type	Spike
Dilution	1
Comment	5
QC Ref File Name	045_ARF.d
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Spk Amt	%Rec	QC Flag
Be	9	No Gas	23.392	1.373	58644	1.71	20	105	
Ni	60	He	222.392	0.096	318157	0.53	200	95	
Ni	62	He	221.663	0.838	50226	0.28	200	95	
Cu	63	He	125.116	0.333	521982	0.42	100	94	
Cu	65	He	126.192	1.127	264533	0.68	100	95	
Zn	66	He	387.492	0.358	205181	0.53	200	105	
As	75	He	205.093	0.993	68240	0.39	200	96	
Se	77	H2	190.984	0.554	35263	0.63	200	94	
Se	78	H2	185.351	1.281	108115	0.25	200	92	
Sb	121	He	89.373	0.720	191794	0.58	200	45	Flag
Sb	123	He	88.866	0.499	154223	0.32	200	44	Flag
[Pb]	206	He	218.849	1.994	1354096	0.22	200	90	
[Pb]	207	He	224.780	1.331	1239021	0.58	200	94	
Pb	208	He	223.491	1.267	5668881	0.83	200	93	

PDS OK

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	578127	0.88	604198	95.69	30	120	
Ge	72	He	90541	0.63	81288	111.38	30	120	
Ge	72	H2	1029341	1.17	933781	110.23	30	120	
In	115	He	782645	0.22	717634	109.06	30	120	
Lu	175	He	2334027	1.91	2064230	113.07	30	120	

Matrix Spike Sample (MS) Report

Sample Table

Sample Name	K1604717-1SD
Data File Name	052_Spk.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T12:08:35-07:00
Sample Type	Spike
Dilution	1
Comment	S
QC Ref File Name	045_ARF.d
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Spk Amt	%Rec	QC Flag
Be	9	No Gas	23.551	1.452	59269	0.13	20	105	
Ni	60	He	223.787	0.361	320422	0.97	200	96	
Ni	62	He	226.697	1.527	51407	0.97	200	98	
Cu	63	He	125.044	0.583	522108	0.16	100	94	
Cu	65	He	126.145	0.936	264656	0.66	100	95	
Zn	66	He	374.059	0.914	198228	0.42	200	99	
As	75	He	209.607	0.590	69801	0.18	200	98	
Se	77	H2	199.520	2.225	36349	0.82	200	99	
Se	78	H2	193.402	2.497	111406	0.66	200	97	
Sb	121	He	96.210	1.119	203347	1.33	200	48	Flag
Sb	123	He	95.551	0.953	163315	0.70	200	48	Flag
[Pb]	206	He	226.835	0.776	1379062	0.46	200	94	
[Pb]	207	He	234.449	0.777	1269711	0.55	200	99	
Pb	208	He	232.231	0.532	5787545	0.77	200	97	

PDS OK

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	580458	1.59	604198	96.07	30	120	
Ge	72	He	90617	0.67	81288	111.48	30	120	
Ge	72	H2	1016835	2.53	933781	108.89	30	120	
In	115	He	770830	0.34	717634	107.41	30	120	
Lu	175	He	2292945	1.20	2064230	111.08	30	120	

Sample Report

Sample Table

Sample Name	K1604717-022
Data File Name	053SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T12:12:24-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	2.754	1.63	7131	0.04	
Ni	60	He	21.412	0.81	29769	0.07	
Ni	62	He	20.776	0.52	4586	0.45	
Cu	63	He	56.766	1.29	229354	0.02	
Cu	65	He	57.031	1.29	115784	0.05	
Zn	66	He	156.574	1.68	80297	0.19	
As	75	He	14.484	1.34	4672	0.31	
Se	77	H2	2.453	15.30	1123	0.22	
Se	78	H2	0.616	3.57	355	0.17	
Sb	121	He	0.674	2.01	1492	0.05	
Sb	123	He	0.696	4.33	1226	0.06	
[Pb]	206	He	84.322	0.38	505193	0.02	
[Pb]	207	He	81.902	0.47	437088	0.02	
Pb	208	He	83.109	0.54	2040997	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	596013	0.48	604198	98.65	30	120	
Ge	72	He	87662	0.22	81288	107.84	30	120	
Ge	72	H2	995509	1.11	933781	106.61	30	120	
In	115	He	762385	0.70	717634	106.24	30	120	
Lu	175	He	2259181	1.05	2064230	109.44	30	120	

Sample Report

Sample Table

Sample Name	K1604717-023
Data File Name	054SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T12:16:13-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	2.097	4.01	5364	0.04	
Ni	60	He	17.738	0.73	25309	0.07	
Ni	62	He	17.163	1.78	3890	0.44	
Cu	63	He	22.993	1.93	95306	0.02	
Cu	65	He	22.789	2.36	47463	0.05	
Zn	66	He	90.473	1.98	47586	0.19	
As	75	He	9.488	2.56	3140	0.30	
Se	77	H2	1.961	7.98	1054	0.19	
Se	78	H2	0.315	20.62	188	0.17	
Sb	121	He	0.311	4.83	753	0.04	
Sb	123	He	0.361	5.45	676	0.05	
[Pb]	206	He	30.078	1.27	188607	0.02	
[Pb]	207	He	28.807	1.48	160908	0.02	
Pb	208	He	29.560	2.04	759733	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	588675	2.51	604198	97.43	30	120	
Ge	72	He	89884	1.32	81288	110.58	30	120	
Ge	72	H2	1012227	2.38	933781	108.40	30	120	
In	115	He	782203	0.90	717634	109.00	30	120	
Lu	175	He	2364164	1.85	2064230	114.53	30	120	

Sample Report

Sample Table

Sample Name	K1604717-024
Data File Name	055SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T12:20:03-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	2.544	1.14	6545	0.04	
Ni	60	He	11.860	0.97	16987	0.07	
Ni	62	He	11.414	2.04	2601	0.44	
Cu	63	He	14.233	2.01	59123	0.02	
Cu	65	He	14.108	1.85	29454	0.05	
Zn	66	He	102.609	0.99	54047	0.19	
As	75	He	9.913	2.71	3285	0.30	
Se	77	H2	2.335	14.29	1129	0.21	
Se	78	H2	0.264	7.62	161	0.16	
Sb	121	He	0.238	14.62	600	0.04	
Sb	123	He	0.240	13.68	469	0.05	
[Pb]	206	He	21.805	2.08	134895	0.02	
[Pb]	207	He	20.602	1.95	113538	0.02	
Pb	208	He	21.273	2.11	539443	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	591847	1.03	604198	97.96	30	120	
Ge	72	He	90015	1.03	81288	110.74	30	120	
Ge	72	H2	1020163	2.75	933781	109.25	30	120	
In	115	He	785748	0.62	717634	109.49	30	120	
Lu	175	He	2332164	1.94	2064230	112.98	30	120	

Sample Report

Sample Table

Sample Name	K1604717-025
Data File Name	056SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T12:23:54-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	2.744	0.86	6990	0.04	
Ni	60	He	23.176	2.30	33002	0.07	
Ni	62	He	23.666	2.27	5349	0.44	
Cu	63	He	24.796	0.49	102712	0.02	
Cu	65	He	25.116	0.88	52276	0.05	
Zn	66	He	125.387	1.74	65893	0.19	
As	75	He	11.341	1.96	3750	0.30	
Se	77	H2	2.469	6.12	1152	0.21	
Se	78	H2	0.306	12.70	185	0.17	
Sb	121	He	0.338	1.90	812	0.04	
Sb	123	He	0.349	6.69	656	0.05	
[Pb]	206	He	32.007	1.78	199739	0.02	
[Pb]	207	He	31.015	2.57	172389	0.02	
Pb	208	He	31.578	1.93	807733	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	586087	2.15	604198	97.00	30	120	
Ge	72	He	89819	0.37	81288	110.50	30	120	
Ge	72	H2	1018688	1.73	933781	109.09	30	120	
In	115	He	783135	0.65	717634	109.13	30	120	
Lu	175	He	2353090	2.30	2064230	113.99	30	120	

Sample Report

Sample Table

Sample Name	K1604717-026
Data File Name	057SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T12:27:43-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	6.657	1.07	16328	0.04	
Ni	60	He	58.803	2.08	83240	0.07	
Ni	62	He	58.469	2.16	13118	0.45	
Cu	63	He	104.047	1.18	429097	0.02	
Cu	65	He	104.413	1.50	216380	0.05	
Zn	66	He	450.671	1.68	235877	0.19	
As	75	He	36.951	1.91	12158	0.30	
Se	77	H2	10.145	50.47	1674	0.61	
Se	78	H2	2.115	40.82	806	0.26	
Sb	121	He	1.000	3.13	2175	0.05	
Sb	123	He	1.054	1.27	1832	0.06	
[Pb]	206	He	135.843	1.04	821707	0.02	
[Pb]	207	He	132.380	0.52	713332	0.02	
Pb	208	He	136.295	0.12	3379668	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	565260	1.03	604198	93.56	30	120	
Ge	72	He	89507	1.47	81288	110.11	30	120	
Ge	72	H2	739552	36.03	933781	79.20	30	120	
In	115	He	762827	0.97	717634	106.30	30	120	
Lu	175	He	2281258	1.05	2064230	110.51	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	058_CCV.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T12:31:31-07:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	25.298	1.602	65971	0.46	25	101	
Ni	60	He	24.289	1.050	35464	0.87	25	97	
Ni	62	He	25.449	4.227	5893	2.69	25	102	
Cu	63	He	24.183	1.438	102727	0.76	25	97	
Cu	65	He	24.244	2.283	51744	0.87	25	97	
Zn	66	He	24.228	2.611	13093	1.32	25	97	
As	75	He	24.964	0.541	8457	1.60	25	100	
Se	77	H2	25.495	0.718	5436	1.17	25	102	
Se	78	H2	24.494	2.372	14579	0.73	25	98	
Sb	121	He	25.311	1.233	55160	1.45	25	101	
Sb	123	He	25.118	0.383	44254	0.63	25	100	
[Pb]	206	He	23.715	1.189	147091	0.38	25	95	
[Pb]	207	He	23.736	1.674	131133	0.62	25	95	
Pb	208	He	23.827	1.732	605722	0.66	25	95	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	601460	1.14	604198	99.55	30	120	
Ge	72	He	92119	1.68	81288	113.32	30	120	
Ge	72	H2	1050027	1.65	933781	112.45	30	120	
In	115	He	793862	0.38	717634	110.62	30	120	
Lu	175	He	2337986	1.57	2064230	113.26	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	059_CCB.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T12:35:20-07:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	0.012	18.9	49	12.9	0.04	
Ni	60	He	0.010	134.8	139	13.9	0.2	
Ni	62	He	-0.013	-285.9	29	29.0	0.2	
Cu	63	He	0.014	38.2	167	12.5	0.2	
Cu	65	He	0.008	136.9	73	31.8	0.2	
Zn	66	He	0.072	45.3	83	21.2	1	
As	75	He	-0.003	-212.4	6	36.7	0.25	
Se	77	H2	-0.059	-42.4	721	1.5	20	
Se	78	H2	0.006	113.5	12	34.6	0.5	
Sb	121	He	0.008	75.1	106	12.2	0.2	
Sb	123	He	0.023	73.6	93	33.1	0.05	
[Pb]	206	He	0.015	31.5	191	16.8	0.1	
[Pb]	207	He	0.014	32.2	159	15.9	0.1	
Pb	208	He	0.012	20.5	693	12.0	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	603327	1.03	604198	99.86	30	120	
Ge	72	He	89820	0.72	81288	110.50	30	120	
Ge	72	H2	1049271	1.89	933781	112.37	30	120	
In	115	He	808072	1.05	717634	112.60	30	120	
Lu	175	He	2337111	2.83	2064230	113.22	30	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLCCVS
Data File Name	060LCCV.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T12:39:10-07:00
Sample Type	LLCCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	0.045	13.255	134	11.27	0.04	113	
Ni	60	He	0.358	11.651	636	8.53	0.4	90	
Ni	62	He	0.474	13.669	139	9.70	0.4	119	
Cu	63	He	0.198	5.145	936	5.36	0.2	99	
Cu	65	He	0.212	8.804	500	8.35	0.2	106	
Zn	66	He	1.189	13.029	672	11.38	1	119	
As	75	He	1.065	6.578	360	6.46	1	107	
Se	77	H2	2.151	7.372	1117	3.21	2	108	
Se	78	H2	2.009	1.016	1191	2.38	2	100	
Sb	121	He	0.104	20.328	315	14.84	0.1	104	
Sb	123	He	0.109	11.929	245	9.35	0.1	109	
[Pb]	206	He	0.113	12.009	783	10.17	0.1	113	
[Pb]	207	He	0.101	12.843	630	11.70	0.1	101	
Pb	208	He	0.108	2.257	3058	2.51	0.1	108	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	597913	1.97	604198	98.96	30	120	
Ge	72	He	90186	0.85	81288	110.95	30	120	
Ge	72	H2	1039246	1.39	933781	111.29	30	120	
In	115	He	800160	0.20	717634	111.50	30	120	
Lu	175	He	2297329	0.56	2064230	111.29	30	120	

Prep Blank (PB) Report

Sample Table

Sample Name	KQ1605187-01
Data File Name	061_PB.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T12:42:59-07:00
Sample Type	PB
Dilution	1
Comment	5
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	0.008	27.7	38	13.6	0.04	
Ni	60	He	0.072	54.5	229	23.9	0.2	
Ni	62	He	0.113	145.1	58	64.3	0.2	
Cu	63	He	0.026	13.1	219	7.2	0.2	
Cu	65	He	0.023	34.3	106	15.9	0.2	
Zn	66	He	0.257	6.5	182	5.6	1	
As	75	He	0.003	359.9	8	45.8	0.25	
Se	77	H2	0.037	653.1	723	5.8	2	
Se	78	H2	0.007	81.7	12	28.5	0.5	
Sb	121	He	-0.011	-44.6	64	16.8	0.1	
Sb	123	He	0.000	-5473.9	52	19.4	0.05	
[Pb]	206	He	0.009	31.8	158	11.6	0.1	
[Pb]	207	He	0.008	90.0	123	30.7	0.1	
Pb	208	He	0.011	6.9	667	2.6	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	605022	1.73	604198	100.14	30	120	
Ge	72	He	90672	0.75	81288	111.54	30	120	
Ge	72	H2	1027717	2.18	933781	110.06	30	120	
In	115	He	807135	0.51	717634	112.47	30	120	
Lu	175	He	2351107	0.37	2064230	113.90	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	KQ1605187-02
Data File Name	062_LCS.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T12:46:49-07:00
Sample Type	LCS
Dilution	1
Comment	20
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	4.951	0.886	13566	0.59	5	99.0	
Ni	60	He	48.995	2.611	67354	1.40	50	98.0	
Ni	62	He	49.038	1.396	10690	2.58	50	98.1	
Cu	63	He	24.773	1.952	99268	0.74	25	99.1	
Cu	65	He	24.978	1.794	50293	0.92	25	99.9	
Zn	66	He	50.631	1.859	25773	2.94	50	101.3	
As	75	He	50.273	1.558	16059	1.25	50	100.5	
Se	77	H2	52.161	2.380	9780	1.47	50	104.3	
Se	78	H2	50.864	0.690	28593	1.24	50	101.7	
Sb	121	He	49.490	0.419	106355	0.36	50	99.0	
Sb	123	He	49.312	1.156	85688	0.45	50	98.6	
[Pb]	206	He	45.951	0.253	271542	0.43	50	91.9	
[Pb]	207	He	47.799	1.154	251617	1.27	50	95.6	
Pb	208	He	46.822	0.404	1134173	0.64	50	93.6	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	631257	1.38	604198	104.48	30	120	
Ge	72	He	86900	1.20	81288	106.90	30	120	
Ge	72	H2	991792	1.90	933781	106.21	30	120	
In	115	He	783482	0.74	717634	109.18	30	120	
Lu	175	He	2228028	0.25	2064230	107.94	30	120	

All Reference Sample Report

Sample Table

Sample Name	K1605072-001
Data File Name	063_ARF.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T12:50:37-07:00
Sample Type	AllRef
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	6.781	0.78	17680	0.04	
Ni	60	He	13.652	1.54	20329	0.07	
Ni	62	He	13.801	2.98	3267	0.42	
Cu	63	He	31.068	0.15	134193	0.02	
Cu	65	He	31.333	1.19	68000	0.05	
Zn	66	He	158.365	0.29	86789	0.18	
As	75	He	11.256	1.34	3881	0.29	
Se	77	H2	4.170	10.64	1483	0.28	
Se	78	H2	0.646	8.66	388	0.17	
Sb	121	He	0.417	2.07	1004	0.04	
Sb	123	He	0.415	17.96	787	0.05	
[Pb]	206	He	57.469	1.34	365892	0.02	
[Pb]	207	He	52.921	2.07	300146	0.02	
Pb	208	He	55.434	1.45	1446720	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	600889	1.13	604198	99.45	30	120	
Ge	72	He	93679	1.03	81288	115.24	30	120	
Ge	72	H2	1037487	0.82	933781	111.11	30	120	
In	115	He	801364	1.80	717634	111.67	30	120	
Lu	175	He	2400714	0.72	2064230	116.30	30	120	

Sample Report

Sample Table

Sample Name	K1605072-001L
Data File Name	064SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T12:S4:37-07:00
Sample Type	Sample
Dilution	1
Comment	25
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	1.369	2.32	3580	0.04	
Ni	60	He	2.724	5.65	4116	0.07	
Ni	62	He	2.830	7.27	689	0.41	
Cu	63	He	6.328	1.40	27128	0.02	
Cu	65	He	6.351	2.01	13682	0.05	
Zn	66	He	32.370	1.27	17587	0.18	
As	75	He	2.402	4.76	825	0.29	
Se	77	H2	0.607	32.73	843	0.07	
Se	78	H2	0.131	12.61	86	0.15	
Sb	121	He	0.068	17.76	239	0.03	
Sb	123	He	0.084	11.11	202	0.04	
[Pb]	206	He	11.959	1.69	74851	0.02	
[Pb]	207	He	10.965	0.69	61137	0.02	
Pb	208	He	11.474	0.73	294369	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	600461	0.98	604198	99.38	30	120	
Ge	72	He	92675	0.48	81288	114.01	30	120	
Ge	72	H2	1048692	1.52	933781	112.31	30	120	
In	115	He	808465	0.06	717634	112.66	30	120	
Lu	175	He	2357648	0.96	2064230	114.21	30	120	

Post Digestion Spike Sample (PDS) Report

Sample Table

Sample Name	K1605072-001A
Data File Name	065_PDS.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T12:58:24-07:00
Sample Type	PDS
Dilution	1
Comment	5
QC Ref File Name	063_ARF.d
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Spk Amt	%Rec	QC Flag
Be	9	No Gas	58.661	2.166	157086	1.03	50	104	
Ni	60	He	62.348	0.460	92856	0.53	50	97	
Ni	62	He	63.204	2.141	14918	1.94	50	99	
Cu	63	He	79.452	0.623	344771	0.82	50	97	
Cu	65	He	79.909	0.742	174237	0.92	50	97	
Zn	66	He	209.072	1.623	115152	1.53	50	101	
As	75	He	60.813	0.936	21048	0.54	50	99	
Se	77	H2	55.386	0.878	11080	1.78	50	102	
Se	78	H2	50.809	1.255	30591	0.34	50	100	
Sb	121	He	50.435	1.046	113021	0.71	50	100	
Sb	123	He	50.458	0.466	91435	0.79	50	100	
[Pb]	206	He	103.378	2.391	661350	0.31	50	92	
[Pb]	207	He	99.098	2.880	564702	0.65	50	92	
Pb	208	He	102.388	3.697	2684481	1.53	50	94	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	617736	1.14	604198	102.24	30	120	
Ge	72	He	94161	0.42	81288	115.84	30	120	
Ge	72	H2	1062254	0.97	933781	113.76	30	120	
In	115	He	817010	0.80	717634	113.85	30	120	
Lu	175	He	2413321	2.25	2064230	116.91	30	120	

Matrix Spike Sample (MS) Report

Sample Table

Sample Name	K1605072-001S
Data File Name	066_Spk.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T13:02:13-07:00
Sample Type	Spike
Dilution	1
Comment	5
QC Ref File Name	063_ARF.d
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Spk Amt	%Rec	QC Flag
Be	9	No Gas	27.853	0.567	72583	0.26	20	105	
Ni	60	He	205.805	1.120	309534	0.58	200	96	
Ni	62	He	205.413	1.616	48939	2.09	200	96	
Cu	63	He	126.087	1.052	553010	0.55	100	95	
Cu	65	He	126.128	0.839	277971	0.45	100	95	
Zn	66	He	335.188	0.789	186598	0.57	200	88	
As	75	He	204.453	0.432	71520	0.36	200	97	
Se	77	H2	202.406	1.355	38689	0.50	200	99	
Se	78	H2	192.957	1.355	116661	0.72	200	96	
Sb	121	He	113.776	0.988	251656	0.27	200	57	Flag
Sb	123	He	113.417	1.054	202877	0.64	200	57	Flag
[Pb]	206	He	253.207	1.121	1614476	1.02	200	98	
[Pb]	207	He	240.770	1.493	1367493	0.89	200	94	
Pb	208	He	247.846	0.760	6477802	0.38	200	96	

PDS OK

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	600989	0.33	604198	99.47	30	120	
Ge	72	He	95188	0.55	81288	117.10	30	120	
Ge	72	H2	1066901	1.04	933781	114.26	30	120	
In	115	He	806774	0.74	717634	112.42	30	120	
Lu	175	He	2404714	0.70	2064230	116.49	30	120	

Matrix Spike Sample (MS) Report

Sample Table

Sample Name	K1605072-001SD
Data File Name	067_Spk.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T13:06:02-07:00
Sample Type	Spike
Dilution	1
Comment	5
QC Ref File Name	063_ARF.d
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Spk Amt	%Rec	QC Flag
Be	9	No Gas	27.270	1.061	69743	1.18	20	102	
Ni	60	He	201.095	1.070	291264	1.04	200	94	
Ni	62	He	199.154	0.542	45692	1.23	200	93	
Cu	63	He	123.967	1.436	523621	1.84	100	93	
Cu	65	He	124.001	0.295	263173	0.69	100	93	
Zn	66	He	334.237	1.144	179180	1.04	200	88	
As	75	He	201.547	0.481	67893	0.27	200	95	
Se	77	H2	231.282	14.427	37489	0.86	200	114	
Se	78	H2	223.682	14.434	114920	0.64	200	112	
Sb	121	He	113.201	0.952	243065	0.99	200	56	Flag
Sb	123	He	113.117	0.463	196427	0.89	200	56	Flag
[Pb]	206	He	236.154	3.826	1480652	4.24	200	89	
[Pb]	207	He	233.977	1.988	1306512	0.02	200	91	
Pb	208	He	237.217	1.535	6095920	1.28	200	91	

PDS OK

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	589824	1.35	604198	97.62	30	120	
Ge	72	He	91664	0.72	81288	112.77	30	120	
Ge	72	H2	918361	13.40	933781	98.35	30	120	
In	115	He	783162	0.71	717634	109.13	30	120	
Lu	175	He	2364637	1.96	2064230	114.55	30	120	

Sample Report

Sample Table

Sample Name	K1605072-002
Data File Name	068SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T13:09:49-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	9.560	1.42	24611	0.04	
Ni	60	He	16.310	0.82	24167	0.07	
Ni	62	He	16.590	0.28	3905	0.42	
Cu	63	He	34.206	1.27	147154	0.02	
Cu	65	He	34.020	1.48	73544	0.05	
Zn	66	He	181.080	1.39	98840	0.18	
As	75	He	13.168	1.53	4522	0.29	
Se	77	H2	5.391	4.25	1711	0.32	
Se	78	H2	0.946	1.70	566	0.17	
Sb	121	He	0.490	6.12	1164	0.04	
Sb	123	He	0.509	11.15	956	0.05	
[Pb]	206	He	55.564	1.96	353580	0.02	
[Pb]	207	He	50.118	1.22	284123	0.02	
Pb	208	He	53.299	1.21	1390349	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	593546	2.09	604198	98.24	30	120	
Ge	72	He	93313	0.46	81288	114.79	30	120	
Ge	72	H2	1040509	1.60	933781	111.43	30	120	
In	115	He	802029	0.77	717634	111.76	30	120	
Lu	175	He	2399795	1.64	2064230	116.26	30	120	

Sample Report

Sample Table

Sample Name	K1605072-003
Data File Name	069SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T13:13:37-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	8.085	2.27	20580	0.04	
Ni	60	He	27.054	0.68	40396	0.07	
Ni	62	He	27.201	7.41	6441	0.42	
Cu	63	He	40.438	1.62	175647	0.02	
Cu	65	He	40.773	2.00	88986	0.05	
Zn	66	He	207.597	0.92	114429	0.18	
As	75	He	12.850	2.03	4456	0.29	
Se	77	H2	4.594	1.92	1576	0.29	
Se	78	H2	0.720	5.41	436	0.17	
Sb	121	He	0.275	4.08	691	0.04	
Sb	123	He	0.288	3.07	563	0.05	
[Pb]	206	He	55.046	1.58	349932	0.02	
[Pb]	207	He	48.103	1.63	272401	0.02	
Pb	208	He	51.857	0.96	1351372	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	586788	1.01	604198	97.12	30	120	
Ge	72	He	94236	1.63	81288	115.93	30	120	
Ge	72	H2	1047204	1.51	933781	112.15	30	120	
In	115	He	799756	0.37	717634	111.44	30	120	
Lu	175	He	2397296	1.68	2064230	116.14	30	120	

Sample Report

Sample Table

Sample Name	K1605072-004
Data File Name	070SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T13:17:26-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	17.445	3.00	44425	0.04	
Ni	60	He	23.027	0.95	35304	0.07	
Ni	62	He	22.478	4.17	5471	0.41	
Cu	63	He	34.577	0.52	154152	0.02	
Cu	65	He	34.588	2.01	77481	0.04	
Zn	66	He	209.262	0.72	118363	0.18	
As	75	He	13.533	1.08	4816	0.28	
Se	77	H2	5.407	4.19	1752	0.31	
Se	78	H2	0.877	4.26	537	0.16	
Sb	121	He	0.525	5.36	1236	0.04	
Sb	123	He	0.531	0.60	991	0.05	
[Pb]	206	He	66.337	2.08	417118	0.02	
[Pb]	207	He	58.658	1.64	328582	0.02	
Pb	208	He	63.092	1.64	1626238	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	587378	1.82	604198	97.22	30	120	
Ge	72	He	96699	0.29	81288	118.96	30	120	
Ge	72	H2	1063920	2.64	933781	113.94	30	120	
In	115	He	797521	0.89	717634	111.13	30	120	
Lu	175	He	2371396	1.38	2064230	114.88	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	071_CCV.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T13:21:14-07:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	25.248	1.625	65708	0.60	25	101	
Ni	60	He	25.170	1.431	35990	0.32	25	101	
Ni	62	He	26.155	3.933	5932	2.77	25	105	
Cu	63	He	25.019	1.608	104092	0.75	25	100	
Cu	65	He	25.066	2.421	52400	1.30	25	100	
Zn	66	He	24.687	1.684	13068	1.83	25	99	
As	75	He	25.322	0.875	8402	1.75	25	101	
Se	77	H2	24.811	0.888	5294	0.68	25	99	
Se	78	H2	24.675	1.645	14646	1.31	25	99	
Sb	121	He	25.173	0.419	55074	0.58	25	101	
Sb	123	He	24.960	0.680	44147	0.49	25	100	
[Pb]	206	He	23.387	0.425	145823	0.72	25	94	
[Pb]	207	He	23.544	0.378	130766	0.73	25	94	
Pb	208	He	23.557	0.703	602072	1.07	25	94	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	600254	1.44	604198	99.35	30	120	
Ge	72	He	90223	1.13	81288	110.99	30	120	
Ge	72	H2	1046842	0.34	933781	112.11	30	120	
In	115	He	796987	0.20	717634	111.06	30	120	
Lu	175	He	2350028	0.37	2064230	113.85	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	072_CCB.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T13:25:04-07:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	0.009	41.7	40	23.4	0.04	
Ni	60	He	0.012	30.8	139	5.0	0.2	
Ni	62	He	0.037	209.8	39	40.5	0.2	
Cu	63	He	0.012	50.1	154	12.6	0.2	
Cu	65	He	0.009	20.5	73	4.5	0.2	
Zn	66	He	0.054	94.1	72	37.6	1	
As	75	He	0.011	186.7	10	65.6	0.25	
Se	77	H2	-0.190	-86.3	681	3.8	20	
Se	78	H2	0.005	36.6	11	9.1	0.5	
Sb	121	He	0.005	64.4	97	7.5	0.2	
Sb	123	He	0.016	40.8	78	14.7	0.05	
[Pb]	206	He	0.009	65.4	154	23.8	0.1	
[Pb]	207	He	0.006	86.7	116	26.6	0.1	
Pb	208	He	0.009	47.3	604	17.8	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	580216	1.12	604198	96.03	30	120	
Ge	72	He	87733	2.42	81288	107.93	30	120	
Ge	72	H2	1026077	0.73	933781	109.88	30	120	
In	115	He	789524	1.58	717634	110.02	30	120	
Lu	175	He	2334561	0.55	2064230	113.10	30	120	

Sample Report

Sample Table

Sample Name	K1605072-005
Data File Name	073SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T13:28:54-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	8.677	1.29	22261	0.04	
Ni	60	He	22.020	1.88	32676	0.07	
Ni	62	He	21.955	3.88	5172	0.42	
Cu	63	He	50.253	2.17	216744	0.02	
Cu	65	He	50.664	1.87	109804	0.05	
Zn	66	He	182.374	1.97	99828	0.18	
As	75	He	14.848	3.47	5112	0.29	
Se	77	H2	5.403	5.63	1719	0.31	
Se	78	H2	0.941	3.71	565	0.17	
Sb	121	He	0.556	4.90	1301	0.04	
Sb	123	He	0.566	3.81	1052	0.05	
[Pb]	206	He	75.676	0.43	484306	0.02	
[Pb]	207	He	69.849	0.35	398203	0.02	
Pb	208	He	73.042	0.21	1916113	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	591433	1.13	604198	97.89	30	120	
Ge	72	He	93590	1.37	81288	115.13	30	120	
Ge	72	H2	1044148	1.62	933781	111.82	30	120	
In	115	He	797110	1.06	717634	111.07	30	120	
Lu	175	He	2413186	0.31	2064230	116.90	30	120	

Sample Report

Sample Table

Sample Name	K1605072-006
Data File Name	074SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T13:32:43-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	6.038	0.73	15686	0.04	
Ni	60	He	8.462	1.73	12767	0.07	
Ni	62	He	8.972	2.56	2155	0.42	
Cu	63	He	14.265	3.41	62226	0.02	
Cu	65	He	14.230	2.03	31199	0.05	
Zn	66	He	107.314	2.90	59353	0.18	
As	75	He	9.624	4.99	3348	0.29	
Se	77	H2	4.771	4.76	1592	0.30	
Se	78	H2	0.697	12.10	417	0.17	
Sb	121	He	0.244	7.89	628	0.04	
Sb	123	He	0.248	5.82	495	0.05	
[Pb]	206	He	45.785	1.19	290909	0.02	
[Pb]	207	He	38.791	1.70	219540	0.02	
Pb	208	He	42.704	1.53	1112142	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	598663	1.58	604198	99.08	30	120	
Ge	72	He	94567	2.80	81288	116.34	30	120	
Ge	72	H2	1036486	0.48	933781	111.00	30	120	
In	115	He	806796	0.66	717634	112.42	30	120	
Lu	175	He	2395808	1.82	2064230	116.06	30	120	

Sample Report

Sample Table

Sample Name	K1605072-007
Data File Name	075SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T13:36:33-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	5.055	1.94	13139	0.04	
Ni	60	He	18.037	0.67	26849	0.07	
Ni	62	He	17.917	4.37	4235	0.42	
Cu	63	He	46.401	0.26	200595	0.02	
Cu	65	He	46.432	1.78	100853	0.05	
Zn	66	He	162.815	0.73	89334	0.18	
As	75	He	11.513	2.26	3974	0.29	
Se	77	H2	3.714	4.48	1406	0.26	
Se	78	H2	0.627	5.51	378	0.17	
Sb	121	He	0.468	6.90	1127	0.04	
Sb	123	He	0.509	6.53	964	0.05	
[Pb]	206	He	75.774	1.81	490337	0.02	
[Pb]	207	He	70.563	1.62	406756	0.02	
Pb	208	He	73.104	1.61	1939137	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	598939	1.81	604198	99.13	30	120	
Ge	72	He	93787	1.13	81288	115.38	30	120	
Ge	72	H2	1041653	1.66	933781	111.55	30	120	
In	115	He	809193	0.62	717634	112.76	30	120	
Lu	175	He	2440499	1.53	2064230	118.23	30	120	

Sample Report

Sample Table

Sample Name	K1605072-008
Data File Name	076SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T13:40:24-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	7.534	0.54	19521	0.04	
Ni	60	He	22.758	2.54	33691	0.07	
Ni	62	He	22.821	0.90	5366	0.43	
Cu	63	He	48.445	1.99	208519	0.02	
Cu	65	He	49.345	2.00	106731	0.05	
Zn	66	He	199.981	3.35	109218	0.18	
As	75	He	15.194	3.79	5218	0.29	
Se	77	H2	5.335	0.35	1654	0.32	
Se	78	H2	0.867	10.13	505	0.17	
Sb	121	He	0.560	6.21	1280	0.04	
Sb	123	He	0.544	5.00	989	0.05	
[Pb]	206	He	73.649	1.56	450293	0.02	
[Pb]	207	He	66.294	1.35	361073	0.02	
Pb	208	He	70.129	1.32	1757557	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	597161	0.98	604198	98.84	30	120	
Ge	72	He	93422	3.46	81288	114.93	30	120	
Ge	72	H2	1012016	1.84	933781	108.38	30	120	
In	115	He	778936	2.36	717634	108.54	30	120	
Lu	175	He	2305572	1.01	2064230	111.69	30	120	

Sample Report

Sample Table

Sample Name	K1605072-009
Data File Name	077SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T13:44:13-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	5.167	1.63	13629	0.04	
Ni	60	He	26.961	0.35	40049	0.07	
Ni	62	He	26.923	5.30	6345	0.42	
Cu	63	He	48.859	0.49	211109	0.02	
Cu	65	He	49.033	0.84	106459	0.05	
Zn	66	He	228.807	0.56	125453	0.18	
As	75	He	13.263	1.85	4575	0.29	
Se	77	H2	2.775	10.56	1247	0.22	
Se	78	H2	0.471	3.21	289	0.16	
Sb	121	He	0.511	10.08	1222	0.04	
Sb	123	He	0.506	6.95	960	0.05	
[Pb]	206	He	53.840	1.26	338455	0.02	
[Pb]	207	He	49.843	1.65	279096	0.02	
Pb	208	He	51.951	1.01	1338654	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	607653	1.06	604198	100.57	30	120	
Ge	72	He	93738	0.38	81288	115.32	30	120	
Ge	72	H2	1052559	0.68	933781	112.72	30	120	
In	115	He	809677	0.87	717634	112.83	30	120	
Lu	175	He	2370391	1.29	2064230	114.83	30	120	

Sample Report

Sample Table

Sample Name	K1605072-010
Data File Name	078SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T13:48:03-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	4.794	1.67	12778	0.04	
Ni	60	He	29.509	2.47	44033	0.07	
Ni	62	He	29.548	0.83	6995	0.42	
Cu	63	He	42.229	0.49	183371	0.02	
Cu	65	He	42.632	1.25	93019	0.05	
Zn	66	He	210.339	0.55	115897	0.18	
As	75	He	13.759	3.41	4769	0.29	
Se	77	H2	3.070	3.29	1296	0.24	
Se	78	H2	0.580	7.89	353	0.16	
Sb	121	He	0.545	3.57	1302	0.04	
Sb	123	He	0.522	4.57	991	0.05	
[Pb]	206	He	51.428	1.90	323847	0.02	
[Pb]	207	He	48.491	1.98	272015	0.02	
Pb	208	He	50.067	1.98	1292344	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	613965	0.41	604198	101.62	30	120	
Ge	72	He	94200	0.62	81288	115.88	30	120	
Ge	72	H2	1047659	1.52	933781	112.20	30	120	
In	115	He	811512	0.61	717634	113.08	30	120	
Lu	175	He	2374873	2.03	2064230	115.05	30	120	

Sample Report

Sample Table

Sample Name	K1605072-011
Data File Name	079SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T13:51:51-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	3.488	0.45	9019	0.04	
Ni	60	He	25.307	28.81	30684	0.08	
Ni	62	He	25.485	27.84	4911	0.52	
Cu	63	He	37.301	28.06	131688	0.03	
Cu	65	He	37.547	26.77	66738	0.06	
Zn	66	He	179.295	28.57	80264	0.22	
As	75	He	13.983	25.21	3957	0.35	
Se	77	H2	2.111	2.92	1102	0.19	
Se	78	H2	0.305	10.22	187	0.16	
Sb	121	He	0.597	28.48	1154	0.05	
Sb	123	He	0.611	27.40	939	0.07	
[Pb]	206	He	103.873	30.67	527629	0.02	
[Pb]	207	He	98.819	30.85	446994	0.02	
Pb	208	He	101.152	31.03	2104863	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	595478	1.70	604198	98.56	30	120	
Ge	72	He	79839	21.86	81288	98.22	30	120	
Ge	72	H2	1032197	1.80	933781	110.54	30	120	
In	115	He	689937	23.41	717634	96.14	30	120	
Lu	175	He	2016132	24.46	2064230	97.67	30	120	

Sample Report

Sample Table

Sample Name	K1605072-012
Data File Name	080SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T13:55:42-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	3.978	2.48	10498	0.04	
Ni	60	He	17.056	2.53	25111	0.07	
Ni	62	He	16.985	1.17	3973	0.43	
Cu	63	He	27.135	1.32	116041	0.02	
Cu	65	He	27.292	0.95	58647	0.05	
Zn	66	He	113.287	1.75	61476	0.18	
As	75	He	10.722	2.78	3661	0.29	
Se	77	H2	3.251	9.81	1311	0.25	
Se	78	H2	0.440	12.01	266	0.17	
Sb	121	He	0.309	3.53	767	0.04	
Sb	123	He	0.320	11.56	621	0.05	
[Pb]	206	He	30.756	1.39	194070	0.02	
[Pb]	207	He	28.814	0.19	161965	0.02	
Pb	208	He	29.783	0.78	770356	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	607844	0.73	604198	100.60	30	120	
Ge	72	He	92741	0.48	81288	114.09	30	120	
Ge	72	H2	1033678	1.74	933781	110.70	30	120	
In	115	He	803091	0.49	717634	111.91	30	120	
Lu	175	He	2378675	0.39	2064230	115.23	30	120	

Sample Report

Sample Table

Sample Name	K1605072-013
Data File Name	081SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T13:59:31-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	5.136	1.79	13351	0.04	
Ni	60	He	37.517	1.30	55542	0.07	
Ni	62	He	37.344	4.15	8766	0.43	
Cu	63	He	52.885	0.95	227954	0.02	
Cu	65	He	53.292	0.27	115427	0.05	
Zn	66	He	158.936	1.72	86947	0.18	
As	75	He	25.256	1.51	8686	0.29	
Se	77	H2	3.902	2.21	1424	0.27	
Se	78	H2	0.803	6.78	476	0.17	
Sb	121	He	0.886	4.89	2040	0.04	
Sb	123	He	0.891	6.95	1638	0.05	
[Pb]	206	He	61.627	0.46	400548	0.02	
[Pb]	207	He	59.896	2.04	346749	0.02	
Pb	208	He	61.021	1.29	1625640	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	598994	1.61	604198	99.14	30	120	
Ge	72	He	93520	0.94	81288	115.05	30	120	
Ge	72	H2	1029823	0.62	933781	110.29	30	120	
In	115	He	802994	0.88	717634	111.89	30	120	
Lu	175	He	2450791	1.05	2064230	118.73	30	120	

Sample Report

Sample Table

Sample Name	K1605072-014
Data File Name	082SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T14:03:21-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	5.974	1.55	15651	0.04	
Ni	60	He	24.917	1.04	37015	0.07	
Ni	62	He	24.942	2.23	5880	0.42	
Cu	63	He	36.795	0.77	158988	0.02	
Cu	65	He	36.907	0.85	80131	0.05	
Zn	66	He	162.547	1.00	89125	0.18	
As	75	He	15.580	0.58	5373	0.29	
Se	77	H2	4.434	2.31	1523	0.29	
Se	78	H2	0.663	5.74	396	0.17	
Sb	121	He	0.552	5.25	1308	0.04	
Sb	123	He	0.554	3.80	1042	0.05	
[Pb]	206	He	40.730	0.75	254802	0.02	
[Pb]	207	He	37.980	0.91	211652	0.02	
Pb	208	He	39.482	0.83	1012462	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	603730	1.53	604198	99.92	30	120	
Ge	72	He	93724	0.47	81288	115.30	30	120	
Ge	72	H2	1031971	1.95	933781	110.52	30	120	
In	115	He	806219	0.57	717634	112.34	30	120	
Lu	175	He	2358632	0.85	2064230	114.26	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	083_CCV.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T14:07:11-07:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	25.257	2.043	65991	0.48	25	101	
Ni	60	He	24.256	1.519	35667	1.22	25	97	
Ni	62	He	24.215	5.510	5650	4.92	25	97	
Cu	63	He	24.015	2.937	102717	1.07	25	96	
Cu	65	He	24.292	1.237	52220	0.99	25	97	
Zn	66	He	24.205	2.857	13173	1.46	25	97	
As	75	He	24.607	2.050	8394	1.03	25	98	
Se	77	H2	24.840	0.571	5349	1.23	25	99	
Se	78	H2	24.092	1.300	14433	0.69	25	96	
Sb	121	He	25.165	1.022	55468	1.07	25	101	
Sb	123	He	25.099	1.158	44723	0.48	25	100	
[Pb]	206	He	22.931	0.934	143361	1.05	25	92	
[Pb]	207	He	23.135	0.711	128836	0.49	25	93	
Pb	208	He	23.155	0.241	593371	0.06	25	93	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	602704	2.02	604198	99.75	30	120	
Ge	72	He	92778	2.15	81288	114.14	30	120	
Ge	72	H2	1056677	1.39	933781	113.16	30	120	
In	115	He	802950	0.68	717634	111.89	30	120	
Lu	175	He	2356307	0.25	2064230	114.15	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	084_CCB.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T14:11:01-07:00
Sample Type	CCB
Dilution	1
Comment	
I5TD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	0.008	27.9	38	13.9	0.04	
Ni	60	He	0.008	204.1	140	16.7	0.2	
Ni	62	He	-0.026	-167.8	27	37.5	0.2	
Cu	63	He	0.009	44.6	150	11.5	0.2	
Cu	65	He	0.008	54.4	76	13.5	0.2	
Zn	66	He	0.058	41.9	78	16.2	1	
As	75	He	0.002	684.6	7	51.6	0.25	
Se	77	H2	0.153	25.3	768	1.9	20	
Se	78	H2	-0.006	-82.7	5	52.9	0.5	
Sb	121	He	0.004	290.0	97	23.7	0.2	
Sb	123	He	0.023	31.0	93	15.0	0.05	
[Pb]	206	He	0.003	82.4	121	14.1	0.1	
[Pb]	207	He	0.012	51.3	147	21.9	0.1	
Pb	208	He	0.007	26.8	568	7.4	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	614197	1.45	604198	101.65	30	120	
Ge	72	He	91971	1.08	81288	113.14	30	120	
Ge	72	H2	1060149	1.57	933781	113.53	30	120	
In	115	He	805562	1.38	717634	112.25	30	120	
Lu	175	He	2366469	1.27	2064230	114.64	30	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLCCVS
Data File Name	085LCCV.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T14:14:51-07:00
Sample Type	LLCCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	0.051	21.228	151	20.07	0.04	127	
Ni	60	He	0.451	13.602	773	12.32	0.4	113	
Ni	62	He	0.407	7.388	124	6.18	0.4	102	
Cu	63	He	0.232	12.116	1081	10.29	0.2	116	
Cu	65	He	0.223	11.998	524	9.65	0.2	111	
Zn	66	He	1.029	10.732	591	8.67	1	103	
As	75	He	1.021	5.613	347	6.65	1	102	
Se	77	H2	1.867	4.330	1083	3.56	2	93	
Se	78	H2	1.879	3.569	1133	4.74	2	94	
Sb	121	He	0.111	16.302	331	12.80	0.1	111	
Sb	123	He	0.107	15.026	242	12.77	0.1	107	
[Pb]	206	He	0.109	4.065	779	4.37	0.1	109	
[Pb]	207	He	0.098	6.627	628	5.85	0.1	98	
Pb	208	He	0.104	0.262	3031	0.66	0.1	104	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	607904	1.43	604198	100.61	30	120	
Ge	72	He	90681	1.18	81288	111.56	30	120	
Ge	72	H2	1055790	2.19	933781	113.07	30	120	
In	115	He	799848	1.27	717634	111.46	30	120	
Lu	175	He	2352220	0.89	2064230	113.95	30	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLCCVS 2X
Data File Name	086_QC1.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T14:18:42-07:00
Sample Type	QC1
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

B 5/26/16 not needed

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	0.084	8.258	238	6.85	0.08	105	
Ni	60	He	0.906	4.020	1389	2.98	0.8	113	
Ni	62	He	0.807	6.813	210	5.72	0.8	101	
Cu	63	He	0.406	9.813	1762	5.58	0.4	102	
Cu	65	He	0.383	6.062	840	2.75	0.4	96	
Zn	66	He	1.927	6.029	1041	1.96	2	96	
As	75	He	1.926	4.213	634	7.18	2	96	
Se	77	H2	4.267	8.159	1436	3.48	4	107	
Se	78	H2	3.877	4.468	2187	3.39	4	97	
Sb	121	He	0.219	11.371	553	8.28	0.2	109	
Sb	123	He	0.221	1.602	432	3.86	0.2	110	
[Pb]	206	He	0.182	7.348	1203	2.09	0.2	91	
[Pb]	207	He	0.203	5.670	1181	7.32	0.2	101	
Pb	208	He	0.187	6.917	5031	4.44	0.2	93	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	608278	0.90	604198	100.68	30	120	
Ge	72	He	88543	3.75	81288	108.93	30	120	
Ge	72	H2	992414	1.40	933781	106.28	30	120	
In	115	He	780944	3.68	717634	108.82	30	120	
Lu	175	He	2299760	4.85	2064230	111.41	30	120	

Sample Report

Sample Table

Sample Name	LLCCVS 1.0 ppb
Data File Name	087SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T14:22:33-07:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

BJ 5/26/16 not needed

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	1.069	2.14	2786	0.04	
Ni	60	He	1.053	5.40	1647	0.06	
Ni	62	He	1.142	5.41	293	0.39	
Cu	63	He	1.085	2.62	4677	0.02	
Cu	65	He	1.048	1.20	2274	0.05	
Zn	66	He	1.347	6.25	766	0.18	
As	75	He	0.944	7.36	324	0.29	
Se	77	H2	0.987	19.65	912	0.11	
Se	78	H2	0.997	3.78	600	0.17	
Sb	121	He	0.927	2.49	2112	0.04	
Sb	123	He	0.913	3.12	1663	0.05	
[Pb]	206	He	0.997	1.96	6331	0.02	
[Pb]	207	He	0.973	3.62	5502	0.02	
Pb	208	He	0.988	1.02	25712	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	597638	0.77	604198	98.91	30	120	
Ge	72	He	91375	0.40	81288	112.41	30	120	
Ge	72	H2	1047164	1.28	933781	112.14	30	120	
In	115	He	796815	0.50	717634	111.03	30	120	
Lu	175	He	2358975	1.34	2064230	114.28	30	120	

Sample Report

Sample Table

Sample Name	K1605072-015
Data File Name	088SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T14:26:23-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	4.519	3.31	10763	0.04	
Ni	60	He	23.906	1.39	32799	0.07	
Ni	62	He	24.625	2.53	5361	0.46	
Cu	63	He	40.995	0.93	163561	0.03	
Cu	65	He	41.531	1.42	83259	0.05	
Zn	66	He	132.298	1.79	66991	0.20	
As	75	He	12.890	2.15	4106	0.31	
Se	77	H2	3.971	5.39	1371	0.29	
Se	78	H2	0.624	5.04	356	0.18	
Sb	121	He	0.418	2.30	936	0.04	
Sb	123	He	0.439	11.15	774	0.06	
[Pb]	206	He	41.344	0.91	248043	0.02	
[Pb]	207	He	39.313	1.37	210096	0.02	
Pb	208	He	40.327	0.91	991724	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	548867	1.61	604198	90.84	30	120	
Ge	72	He	86553	0.75	81288	106.48	30	120	
Ge	72	H2	982848	1.66	933781	105.25	30	120	
In	115	He	746141	0.65	717634	103.97	30	120	
Lu	175	He	2261979	0.90	2064230	109.58	30	120	

Sample Report

Sample Table

Sample Name	K1605072-016
Data File Name	089SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T14:30:11-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	3.586	1.08	8701	0.04	
Ni	60	He	32.142	2.31	44506	0.07	
Ni	62	He	32.193	3.13	7073	0.46	
Cu	63	He	89.506	1.94	360587	0.02	
Cu	65	He	90.448	1.47	183105	0.05	
Zn	66	He	179.342	2.18	91715	0.20	
As	75	He	14.326	1.42	4609	0.31	
Se	77	H2	3.941	2.46	1371	0.29	
Se	78	H2	0.786	7.22	447	0.18	
Sb	121	He	0.568	2.98	1249	0.05	
Sb	123	He	0.584	1.12	1018	0.06	
[Pb]	206	He	70.824	0.57	430568	0.02	
[Pb]	207	He	68.758	0.75	372351	0.02	
Pb	208	He	69.876	0.53	1741291	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	558805	1.55	604198	92.49	30	120	
Ge	72	He	87441	1.68	81288	107.57	30	120	
Ge	72	H2	986788	0.76	933781	105.68	30	120	
In	115	He	749087	0.18	717634	104.38	30	120	
Lu	175	He	2292419	0.96	2064230	111.05	30	120	

Sample Report

Sample Table

Sample Name	K1605072-017
Data File Name	090SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T14:34:02-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	3.707	1.72	9475	0.04	
Ni	60	He	129.079	0.85	183882	0.07	
Ni	62	He	130.115	0.80	29362	0.44	
Cu	63	He	80.356	0.45	333757	0.02	
Cu	65	He	81.939	0.91	171004	0.05	
Zn	66	He	305.243	0.60	160901	0.19	
As	75	He	15.775	2.59	5230	0.30	
Se	77	H2	2.605	7.75	1181	0.22	
Se	78	H2	0.453	7.46	270	0.17	
Sb	121	He	0.373	4.66	877	0.04	
Sb	123	He	0.346	2.10	644	0.05	
[Pb]	206	He	41.610	0.74	259139	0.02	
[Pb]	207	He	41.188	0.56	228498	0.02	
Pb	208	He	41.427	0.15	1057545	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	588631	1.31	604198	97.42	30	120	
Ge	72	He	90130	0.98	81288	110.88	30	120	
Ge	72	H2	1021884	2.45	933781	109.44	30	120	
In	115	He	775469	1.10	717634	108.06	30	120	
Lu	175	He	2347981	0.50	2064230	113.75	30	120	

Sample Report

Sample Table

Sample Name	K1605072-018
Data File Name	091SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T14:37:52-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	3.343	2.71	8655	0.04	
Ni	60	He	103.437	1.01	150179	0.07	
Ni	62	He	103.935	1.43	23908	0.43	
Cu	63	He	66.774	1.30	282639	0.02	
Cu	65	He	66.867	1.05	142221	0.05	
Zn	66	He	245.827	1.21	132058	0.19	
As	75	He	12.165	1.27	4113	0.30	
Se	77	H2	2.340	1.65	1159	0.20	
Se	78	H2	0.391	4.88	240	0.16	
Sb	121	He	0.322	8.54	784	0.04	
Sb	123	He	0.338	12.18	643	0.05	
[Pb]	206	He	38.035	0.59	241597	0.02	
[Pb]	207	He	37.729	0.81	213470	0.02	
Pb	208	He	37.999	1.11	989332	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	596286	1.61	604198	98.69	30	120	
Ge	72	He	91849	0.72	81288	112.99	30	120	
Ge	72	H2	1045440	1.44	933781	111.96	30	120	
In	115	He	791198	0.35	717634	110.25	30	120	
Lu	175	He	2394713	0.75	2064230	116.01	30	120	

Sample Report

Sample Table

Sample Name	K1605072-019
Data File Name	092SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T14:41:41-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	3.516	1.30	9203	0.04	
Ni	60	He	108.803	0.62	158673	0.07	
Ni	62	He	110.519	1.83	25532	0.43	
Cu	63	He	77.313	0.54	328700	0.02	
Cu	65	He	77.769	0.73	166138	0.05	
Zn	66	He	266.242	0.64	143663	0.19	
As	75	He	31.605	1.44	10721	0.29	
Se	77	H2	2.489	13.22	1177	0.21	
Se	78	H2	0.457	8.10	277	0.17	
Sb	121	He	0.318	8.72	786	0.04	
Sb	123	He	0.362	1.64	694	0.05	
[Pb]	206	He	44.389	0.60	282502	0.02	
[Pb]	207	He	43.587	1.39	247086	0.02	
Pb	208	He	43.977	0.91	1147241	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	602819	2.00	604198	99.77	30	120	
Ge	72	He	92256	0.56	81288	113.49	30	120	
Ge	72	H2	1038001	1.15	933781	111.16	30	120	
In	115	He	799943	0.62	717634	111.47	30	120	
Lu	175	He	2399636	1.54	2064230	116.25	30	120	

Sample Report

Sample Table

Sample Name	K1605072-020
Data File Name	093SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T14:45:31-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	3.914	1.21	10396	0.04	
Ni	60	He	83.696	1.80	123539	0.07	
Ni	62	He	83.975	2.14	19645	0.43	
Cu	63	He	58.534	1.44	251863	0.02	
Cu	65	He	59.169	1.22	127932	0.05	
Zn	66	He	231.195	1.57	126248	0.18	
As	75	He	13.640	1.10	4686	0.29	
Se	77	H2	2.837	8.51	1243	0.23	
Se	78	H2	0.404	7.08	246	0.16	
Sb	121	He	0.265	7.04	677	0.04	
Sb	123	He	0.295	10.88	581	0.05	
[Pb]	206	He	37.902	1.20	243475	0.02	
[Pb]	207	He	36.901	1.09	211156	0.02	
Pb	208	He	37.476	0.78	986789	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	611701	1.27	604198	101.24	30	120	
Ge	72	He	93371	1.44	81288	114.87	30	120	
Ge	72	H2	1039203	1.72	933781	111.29	30	120	
In	115	He	810046	0.58	717634	112.88	30	120	
Lu	175	He	2421792	0.24	2064230	117.32	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	094_CCV.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T14:49:20-07:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	25.168	1.775	65628	0.61	25	101	
Ni	60	He	25.003	2.527	35928	1.23	25	100	
Ni	62	He	24.985	6.288	5695	4.91	25	100	
Cu	63	He	24.400	1.673	102024	0.31	25	98	
Cu	65	He	24.290	1.729	51037	1.03	25	97	
Zn	66	He	24.251	2.611	12900	1.23	25	97	
As	75	He	25.102	0.852	8370	0.66	25	100	
Se	77	H2	24.967	1.915	5254	1.37	25	100	
Se	78	H2	24.459	2.218	14331	2.13	25	98	
Sb	121	He	25.041	2.379	55089	1.74	25	100	
Sb	123	He	24.920	0.824	44327	1.49	25	100	
[Pb]	206	He	22.890	0.965	144703	0.94	25	92	
[Pb]	207	He	22.767	0.686	128209	1.26	25	91	
Pb	208	He	22.740	0.334	589267	1.04	25	91	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	601485	2.13	604198	99.55	30	120	
Ge	72	He	90678	1.39	81288	111.55	30	120	
Ge	72	H2	1033383	1.03	933781	110.67	30	120	
In	115	He	801483	0.89	717634	111.68	30	120	
Lu	175	He	2382664	0.72	2064230	115.43	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	095_CCB.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T14:53:11-07:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	0.005	18.8	30	8.5	0.04	
Ni	60	He	0.037	59.8	179	17.7	0.2	
Ni	62	He	0.060	167.8	46	49.8	0.2	
Cu	63	He	0.014	13.3	171	4.9	0.2	
Cu	65	He	0.006	123.5	69	21.8	0.2	
Zn	66	He	0.025	124.9	59	27.9	1	
As	75	He	-0.005	-217.0	5	72.1	0.25	
Se	77	H2	-0.123	-59.6	701	0.8	20	
Se	78	H2	-0.001	-169.1	7	20.8	0.5	
Sb	121	He	0.008	119.8	106	20.0	0.2	
Sb	123	He	0.017	87.4	81	31.9	0.05	
[Pb]	206	He	0.004	111.7	126	25.5	0.1	
[Pb]	207	He	0.006	68.6	116	21.8	0.1	
Pb	208	He	0.007	25.7	556	8.7	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	600790	1.25	604198	99.44	30	120	
Ge	72	He	90373	0.29	81288	111.18	30	120	
Ge	72	H2	1037795	1.44	933781	111.14	30	120	
In	115	He	798185	0.42	717634	111.22	30	120	
Lu	175	He	2345908	1.64	2064230	113.65	30	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLCCVS
Data File Name	096LCCV.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T14:57:02-07:00
Sample Type	LLCCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	0.046	0.592	137	2.76	0.04	116	
Ni	60	He	0.386	10.875	677	8.11	0.4	97	
Ni	62	He	0.420	20.995	127	14.65	0.4	105	
Cu	63	He	0.208	8.163	974	6.44	0.2	104	
Cu	65	He	0.237	10.226	552	9.78	0.2	118	
Zn	66	He	1.132	5.597	643	4.49	1	113	
As	75	He	1.051	5.905	355	4.89	1	105	
Se	77	H2	2.097	11.879	1108	3.29	2	105	
Se	78	H2	1.977	2.924	1173	3.98	2	99	
Sb	121	He	0.102	20.318	308	15.56	0.1	102	
Sb	123	He	0.114	16.228	249	11.81	0.1	114	
[Pb]	206	He	0.092	5.744	678	3.97	0.1	92	
[Pb]	207	He	0.100	8.227	640	8.02	0.1	100	
Pb	208	He	0.096	0.889	2845	0.41	0.1	96	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	600408	2.77	604198	99.37	30	120	
Ge	72	He	90316	1.23	81288	111.11	30	120	
Ge	72	H2	1039732	1.09	933781	111.35	30	120	
In	115	He	790190	1.07	717634	110.11	30	120	
Lu	175	He	2361348	1.16	2064230	114.39	30	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLCCVS 2X
Data File Name	097_QC1.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T15:00:51-07:00
Sample Type	QC1
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

Dy 5/26/16 not needed

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	0.083	11.033	234	9.71	0.08	104	
Ni	60	He	0.763	4.921	1224	3.63	0.8	95	
Ni	62	He	0.755	24.111	204	20.77	0.8	94	
Cu	63	He	0.409	7.197	1828	6.65	0.4	102	
Cu	65	He	0.398	5.740	896	5.05	0.4	99	
Zn	66	He	1.953	2.540	1086	1.80	2	98	
As	75	He	1.925	2.909	651	2.48	2	96	
Se	77	H2	4.117	4.984	1479	2.57	4	103	
Se	78	H2	3.808	3.030	2254	2.71	4	95	
Sb	121	He	0.209	3.452	546	4.28	0.2	105	
Sb	123	He	0.208	3.501	419	1.79	0.2	104	
[Pb]	206	He	0.172	15.647	1178	13.28	0.2	86	
[Pb]	207	He	0.182	10.893	1099	9.30	0.2	91	
Pb	208	He	0.183	8.037	5104	6.51	0.2	92	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	601056	1.30	604198	99.48	30	120	
Ge	72	He	91059	0.78	81288	112.02	30	120	
Ge	72	H2	1041097	0.31	933781	111.49	30	120	
In	115	He	798068	1.44	717634	111.21	30	120	
Lu	175	He	2372024	2.09	2064230	114.91	30	120	

Sample Report

Sample Table

Sample Name	LLCCVS 1.0 ppb
Data File Name	098SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T15:04:41-07:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

5/26/16 not needed

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	1.030	7.52	2685	0.04	
Ni	60	He	1.051	3.91	1647	0.06	
Ni	62	He	0.965	34.75	253	0.38	
Cu	63	He	1.028	3.75	4449	0.02	
Cu	65	He	1.079	2.31	2344	0.05	
Zn	66	He	1.389	6.75	790	0.18	
As	75	He	1.023	3.93	351	0.29	
Se	77	H2	1.124	18.45	939	0.12	
Se	78	H2	0.984	1.94	594	0.17	
Sb	121	He	0.904	3.32	2050	0.04	
Sb	123	He	0.929	4.11	1681	0.06	
[Pb]	206	He	0.958	1.38	6117	0.02	
[Pb]	207	He	0.969	3.28	5505	0.02	
Pb	208	He	0.951	2.61	24871	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	597880	1.92	604198	98.95	30	120	
Ge	72	He	91535	0.41	81288	112.61	30	120	
Ge	72	H2	1050175	1.27	933781	112.46	30	120	
In	115	He	791990	1.00	717634	110.36	30	120	
Lu	175	He	2369649	1.58	2064230	114.80	30	120	

Prep Blank (PB) Report

Sample Table

Sample Name	KQ1605183-01
Data File Name	099_PB.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T15:08:32-07:00
Sample Type	PB
Dilution	1
Comment	5
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	0.002	158.1	22	30.7	0.04	
Ni	60	He	0.032	52.3	172	13.7	0.2	
Ni	62	He	0.039	124.6	41	26.1	0.2	
Cu	63	He	0.021	21.5	199	9.8	0.2	
Cu	65	He	0.024	52.4	109	26.4	0.2	
Zn	66	He	0.331	18.0	222	13.6	1	
As	75	He	-0.002	-220.5	6	28.9	0.25	
Se	77	H2	0.143	64.6	743	1.6	2	
Se	78	H2	0.003	381.0	10	62.4	0.5	
Sb	121	He	-0.023	-32.8	37	45.3	0.1	
Sb	123	He	-0.008	-34.2	37	14.4	0.05	
[Pb]	206	He	0.014	17.9	190	8.0	0.1	
[Pb]	207	He	0.014	27.8	159	14.0	0.1	
Pb	208	He	0.013	12.7	731	6.5	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	622720	1.14	604198	103.07	30	120	
Ge	72	He	90994	1.61	81288	111.94	30	120	
Ge	72	H2	1029312	1.08	933781	110.23	30	120	
In	115	He	813915	0.60	717634	113.42	30	120	
Lu	175	He	2374068	0.58	2064230	115.01	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	KQ1605183-02
Data File Name	100_LCS.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T15:12:22-07:00
Sample Type	LCS
Dilution	1
Comment	20
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	5.049	0.847	14124	0.30	5	101.0	
Ni	60	He	51.616	1.325	75405	0.89	50	103.2	
Ni	62	He	50.375	1.676	11666	1.22	50	100.8	
Cu	63	He	25.521	0.592	108683	1.07	25	102.1	
Cu	65	He	25.954	1.707	55535	1.57	25	103.8	
Zn	66	He	52.495	0.361	28389	0.15	50	105.0	
As	75	He	52.324	0.680	17761	0.36	50	104.6	
Se	77	H2	53.271	2.554	10415	0.72	50	106.5	
Se	78	H2	51.341	2.693	30135	1.73	50	102.7	
Sb	121	He	50.550	0.773	116526	0.98	50	101.1	
Sb	123	He	50.642	0.263	94396	0.48	50	101.3	
[Pb]	206	He	44.753	1.236	292537	1.62	50	89.5	
[Pb]	207	He	46.650	0.846	271620	1.06	50	93.3	
Pb	208	He	45.801	0.574	1227185	1.07	50	91.6	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	644452	0.92	604198	106.66	30	120	
Ge	72	He	92340	0.50	81288	113.60	30	120	
Ge	72	H2	1035949	3.05	933781	110.94	30	120	
In	115	He	840398	0.47	717634	117.11	30	120	
Lu	175	He	2464457	0.90	2064230	119.39	30	120	

All Reference Sample Report

Sample Table

Sample Name	K1605069-001
Data File Name	101_ARF.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T1S:16:13-07:00
Sample Type	AllRef
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	1.879	1.38	5118	0.04	
Ni	60	He	52.329	0.81	77640	0.07	
Ni	62	He	53.003	2.17	12466	0.43	
Cu	63	He	36.402	0.47	1S7380	0.02	
Cu	65	He	36.897	0.96	801S5	0.05	
Zn	66	He	143.909	0.39	78957	0.18	
As	75	He	6.157	2.17	2128	0.29	
Se	77	H2	1.660	17.49	1026	0.16	
Se	78	H2	0.234	16.11	145	0.16	
Sb	121	He	0.136	1.11	399	0.03	
Sb	123	He	0.139	14.37	307	0.05	
[Pb]	206	He	20.926	0.92	134842	0.02	
[Pb]	207	He	20.413	2.50	117149	0.02	
Pb	208	He	20.728	1.62	547432	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	626135	1.29	604198	103.63	30	120	
Ge	72	He	93779	0.51	81288	115.37	30	120	
Ge	72	H2	1038176	3.30	933781	111.18	30	120	
In	115	He	824889	0.46	717634	114.95	30	120	
Lu	175	He	2428665	1.70	2064230	117.65	30	120	

Sample Report

Sample Table

Sample Name	K1605069-001L
Data File Name	102SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T15:20:06-07:00
Sample Type	Sample
Dilution	1
Comment	25
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	0.389	1.49	1045	0.04	
Ni	60	He	10.541	0.60	15769	0.07	
Ni	62	He	11.060	8.91	2630	0.42	
Cu	63	He	7.383	1.83	32062	0.02	
Cu	65	He	7.364	3.93	16068	0.05	
Zn	66	He	29.068	2.64	16014	0.18	
As	75	He	1.266	4.27	444	0.29	
Se	77	H2	0.216	134.64	777	0.03	
Se	78	H2	0.045	15.41	35	0.13	
Sb	121	He	0.002	709.73	92	0.00	
Sb	123	He	0.023	29.18	93	0.02	
[Pb]	206	He	4.279	1.15	27306	0.02	
[Pb]	207	He	4.234	1.80	24062	0.02	
Pb	208	He	4.249	0.80	111138	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	609431	1.26	604198	100.87	30	120	
Ge	72	He	93930	0.86	81288	115.55	30	120	
Ge	72	H2	1058623	2.38	933781	113.37	30	120	
In	115	He	804631	0.80	717634	112.12	30	120	
Lu	175	He	2398042	0.48	2064230	116.17	30	120	

Post Digestion Spike Sample (PDS) Report

Sample Table

Sample Name	K1605069-001A
Data File Name	103_PDS.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T1S:23:56-07:00
Sample Type	PDS
Dilution	1
Comment	5
QC Ref File Name	101_ARF.d
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Spk Amt	%Rec	QC Flag
Be	9	No Gas	51.773	2.433	141219	0.91	50	100	
Ni	60	He	101.438	1.177	150381	0.60	50	98	
Ni	62	He	100.143	1.342	23522	0.75	50	94	
Cu	63	He	84.192	0.693	363861	0.46	50	96	
Cu	65	He	84.072	1.106	182569	0.50	50	94	
Zn	66	He	190.543	1.383	104527	0.80	50	93	
As	75	He	55.083	0.144	18990	0.75	50	98	
Se	77	H2	51.834	2.015	10187	1.18	50	100	
Se	78	H2	49.210	1.124	28981	0.86	50	98	
Sb	121	He	48.761	0.194	109965	0.52	50	97	
Sb	123	He	48.401	0.726	88263	1.10	50	97	
[Pb]	206	He	64.147	0.203	420228	1.48	50	86	
[Pb]	207	He	63.677	0.204	371583	1.20	50	87	
Pb	208	He	64.098	0.492	1721124	0.82	50	87	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	629276	1.56	604198	104.15	30	120	
Ge	72	He	93784	0.63	81288	115.37	30	120	
Ge	72	H2	1039001	1.23	933781	111.27	30	120	
In	115	He	822150	0.54	717634	114.56	30	120	
Lu	175	He	2470102	1.28	2064230	119.66	30	120	

Matrix Spike Sample (MS) Report

Sample Table

Sample Name	K1605069-001S
Data File Name	104_Spk.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T15:27:45-07:00
Sample Type	Spike
Dilution	1
Comment	5
QC Ref File Name	101_ARF.d
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Spk Amt	%Rec	QC Flag
Be	9	No Gas	24.254	1.010	64061	0.20	20	112	
Ni	60	He	263.216	1.080	385151	0.60	200	105	
Ni	62	He	262.573	0.593	60857	1.24	200	105	
Cu	63	He	145.018	0.545	618860	0.72	100	109	
Cu	65	He	145.495	1.332	311972	0.71	100	109	
Zn	66	He	371.131	0.853	201018	0.39	200	114	
As	75	He	209.807	0.627	71411	0.94	200	102	
Se	77	H2	205.247	1.778	37760	0.71	200	102	
Se	78	H2	199.116	1.364	115899	0.34	200	99	
Sb	121	He	138.787	1.100	307751	0.36	200	69	Flag
Sb	123	He	137.468	1.076	246523	0.35	200	69	Flag
[Pb]	206	He	200.669	1.362	1300571	0.43	200	90	
[Pb]	207	He	208.807	1.605	1205510	0.37	200	94	
Pb	208	He	212.525	1.509	5646058	0.27	200	96	

pds ok

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	609149	0.87	604198	100.82	30	120	
Ge	72	He	92617	0.83	81288	113.94	30	120	
Ge	72	H2	1027179	1.30	933781	110.00	30	120	
In	115	He	808891	1.19	717634	112.72	30	120	
Lu	175	He	2444626	1.75	2064230	118.43	30	120	

Matrix Spike Sample (MS) Report

Sample Table

Sample Name	K1605069-0015D
Data File Name	105_5pk.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T15:31:36-07:00
Sample Type	Spike
Dilution	1
Comment	5
QC Ref File Name	101_ARF.d
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Spk Amt	%Rec	QC Flag
Be	9	No Gas	22.576	0.907	59914	0.79	20	103	
Ni	60	He	258.672	1.543	377315	0.53	200	103	
Ni	62	He	258.629	1.180	59753	0.54	200	103	
Cu	63	He	135.798	2.296	577627	0.68	100	99	
Cu	65	He	136.804	0.610	292453	1.15	100	100	
Zn	66	He	351.372	1.319	189722	0.39	200	104	
As	75	He	196.375	2.592	66619	1.04	200	95	
Se	77	H2	187.152	1.431	34488	0.69	200	93	
Se	78	H2	182.385	1.999	106132	0.46	200	91	
Sb	121	He	126.516	0.781	279463	0.45	200	63	Flag
Sb	123	He	126.417	0.918	225829	0.54	200	63	Flag
[Pb]	206	He	200.287	0.476	1296908	0.30	200	90	
[Pb]	207	He	208.545	0.993	1202903	0.65	200	94	
Pb	208	He	213.626	1.110	5670124	0.77	200	96	

PDS ok

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	612032	0.72	604198	101.30	30	120	
Ge	72	He	92337	1.71	81288	113.59	30	120	
Ge	72	H2	1027003	1.60	933781	109.98	30	120	
In	115	He	805707	0.51	717634	112.27	30	120	
Lu	175	He	2442019	0.35	2064230	118.30	30	120	

Sample Report

Sample Table

Sample Name	K1605069-002
Data File Name	106SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T15:35:25-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	4.230	1.68	11158	0.04	
Ni	60	He	24.086	1.88	34974	0.07	
Ni	62	He	24.386	4.64	5618	0.43	
Cu	63	He	39.444	1.80	166548	0.02	
Cu	65	He	39.360	1.87	83510	0.05	
Zn	66	He	431.382	2.43	231068	0.19	
As	75	He	16.363	4.31	5513	0.30	
Se	77	H2	2.279	5.07	1122	0.20	
Se	78	H2	0.524	7.82	312	0.17	
Sb	121	He	0.383	8.01	940	0.04	
Sb	123	He	0.429	4.32	823	0.05	
[Pb]	206	He	52.208	1.27	334515	0.02	
[Pb]	207	He	47.947	0.85	273683	0.02	
Pb	208	He	50.397	1.18	1323651	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	607569	1.25	604198	100.56	30	120	
Ge	72	He	91613	1.88	81288	112.70	30	120	
Ge	72	H2	1021817	1.17	933781	109.43	30	120	
In	115	He	811302	0.43	717634	113.05	30	120	
Lu	175	He	2416011	0.78	2064230	117.04	30	120	

Sample Report

Sample Table

Sample Name	K1605069-003
Data File Name	107SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T15:39:15-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	5.183	0.95	13254	0.04	
Ni	60	He	38.071	1.07	53984	0.07	
Ni	62	He	38.803	0.65	8724	0.44	
Cu	63	He	79.526	0.33	328273	0.02	
Cu	65	He	80.092	0.92	166122	0.05	
Zn	66	He	790.931	0.92	414265	0.19	
As	75	He	22.703	1.78	7479	0.30	
Se	77	H2	3.893	4.13	1378	0.28	
Se	78	H2	0.701	4.03	404	0.17	
Sb	121	He	0.651	2.55	1478	0.04	
Sb	123	He	0.655	7.03	1184	0.06	
[Pb]	206	He	91.322	2.92	575753	0.02	
[Pb]	207	He	87.638	3.32	492146	0.02	
Pb	208	He	89.468	3.52	2311839	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	589173	1.33	604198	97.51	30	120	
Ge	72	He	89572	0.47	81288	110.19	30	120	
Ge	72	H2	997498	1.30	933781	106.82	30	120	
In	115	He	780941	0.66	717634	108.82	30	120	
Lu	175	He	2378921	3.24	2064230	115.24	30	120	

Sample Report

Sample Table

Sample Name	K1605069-004
Data File Name	108SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T15:43:06-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	4.446	0.51	11394	0.04	
Ni	60	He	37.803	1.09	54743	0.07	
Ni	62	He	37.586	1.76	8631	0.44	
Cu	63	He	64.906	0.65	273632	0.02	
Cu	65	He	65.025	1.93	137738	0.05	
Zn	66	He	791.550	0.61	423402	0.19	
As	75	He	18.984	1.46	6388	0.30	
Se	77	H2	2.540	1.95	1108	0.23	
Se	78	H2	0.507	6.09	286	0.18	
Sb	121	He	0.474	1.76	1120	0.04	
Sb	123	He	0.481	5.97	900	0.05	
[Pb]	206	He	67.234	0.54	430436	0.02	
[Pb]	207	He	64.839	0.60	369781	0.02	
Pb	208	He	66.464	0.34	1744206	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	590262	1.76	604198	97.69	30	120	
Ge	72	He	91476	0.81	81288	112.53	30	120	
Ge	72	H2	968997	1.99	933781	103.77	30	120	
In	115	He	795471	0.07	717634	110.85	30	120	
Lu	175	He	2414058	0.64	2064230	116.95	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	109_CCV.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T15:46:55-07:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	25.308	1.025	64005	0.42	25	101	
Ni	60	He	24.150	1.955	34775	1.65	25	97	
Ni	62	He	23.910	2.931	5464	2.67	25	96	
Cu	63	He	24.075	0.227	100861	0.46	25	96	
Cu	65	He	24.072	2.213	50673	1.83	25	96	
Zn	66	He	23.763	1.204	12667	0.73	25	95	
As	75	He	24.970	2.395	8341	1.76	25	100	
Se	77	H2	24.266	3.906	5234	2.08	25	97	
Se	78	H2	24.116	1.184	14428	0.53	25	96	
Sb	121	He	24.990	0.759	53727	0.42	25	100	
Sb	123	He	24.809	0.428	43121	0.09	25	99	
[Pb]	206	He	22.526	1.631	140133	0.66	25	90	
[Pb]	207	He	22.787	1.230	126275	0.18	25	91	
Pb	208	He	22.635	1.358	577203	0.45	25	91	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	583274	1.08	604198	96.54	30	120	
Ge	72	He	90840	0.65	81288	111.75	30	120	
Ge	72	H2	1055253	1.35	933781	113.01	30	120	
In	115	He	783199	0.35	717634	109.14	30	120	
Lu	175	He	2344908	1.07	2064230	113.60	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	110_CCB.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T15:50:46-07:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	0.007	56.6	35	29.0	0.04	
Ni	60	He	0.022	102.5	158	20.3	0.2	
Ni	62	He	0.010	231.1	34	14.8	0.2	
Cu	63	He	0.015	40.1	173	14.5	0.2	
Cu	65	He	0.006	247.6	69	42.3	0.2	
Zn	66	He	0.133	28.6	117	17.1	1	
As	75	He	0.005	143.3	8	27.7	0.25	
Se	77	H2	-0.198	-21.5	675	0.6	20	
Se	78	H2	0.005	156.4	11	39.0	0.5	
Sb	121	He	-0.002	-173.8	82	10.8	0.2	
Sb	123	He	0.021	73.5	87	30.4	0.05	
[Pb]	206	He	0.008	19.7	148	7.9	0.1	
[Pb]	207	He	0.014	28.5	161	15.0	0.1	
Pb	208	He	0.010	48.4	640	20.8	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	592345	0.69	604198	98.04	30	120	
Ge	72	He	90855	0.28	81288	111.77	30	120	
Ge	72	H2	1019742	0.98	933781	109.21	30	120	
In	115	He	790979	0.45	717634	110.22	30	120	
Lu	175	He	2351151	1.48	2064230	113.90	30	120	

Sample Report

Sample Table

Sample Name	K1605069-005
Data File Name	111SMPL.d
Data Path Name	D:\Data\Experiments\0S2616A1.b
Acq Date Time	2016-05-26T15:54:36-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	3.149	2.14	8008	0.04	
Ni	60	He	33.405	1.81	46538	0.07	
Ni	62	He	33.870	3.34	7483	0.45	
Cu	63	He	45.868	1.67	185999	0.02	
Cu	6S	He	46.393	1.74	94538	0.05	
Zn	66	He	345.440	2.36	177726	0.19	
As	75	He	21.487	1.62	6952	0.31	
Se	77	H2	2.888	9.70	1189	0.24	
Se	78	H2	0.418	1.3S	242	0.17	
Sb	121	He	0.406	2.66	951	0.04	
Sb	123	He	0.393	6.59	727	0.05	
[Pb]	206	He	58.471	0.57	369011	0.02	
[Pb]	207	He	55.685	0.44	313067	0.02	
Pb	208	He	57.155	0.06	1478619	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	585561	1.14	604198	96.92	30	120	
Ge	72	He	87982	1.03	81288	108.23	30	120	
Ge	72	H2	986435	1.21	933781	105.64	30	120	
In	115	He	777822	0.92	717634	108.39	30	120	
Lu	175	He	2379659	0.58	2064230	115.28	30	120	

Sample Report

Sample Table

Sample Name	LRSTD
Data File Name	112SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T15:58:25-07:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

@ 5/26/16

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	0.011	4.31	44	0.02	
Ni	60	He	932.608	0.57	1292808	0.07	>LDR
Ni	62	He	934.834	0.41	205225	0.46	>LDR
Cu	63	He	1008.958	2.18	4078924	0.02	>LDR
Cu	65	He	1037.305	1.74	2107171	0.05	>LDR
Zn	66	He	950.258	0.55	487647	0.19	>LDR
As	75	He	0.002	191.84	7	0.02	
Se	77	H2	0.094	178.15	713	0.01	
Se	78	H2	0.013	97.81	15	0.09	
Sb	121	He	-0.020	-36.21	43	-0.05	
Sb	123	He	-0.009	-22.36	35	-0.03	
[Pb]	206	He	965.647	1.53	6026501	0.02	>LDR
[Pb]	207	He	951.865	1.49	5291779	0.02	>LDR
Pb	208	He	942.963	2.00	24121596	0.00	>LDR

LDR = 1000 ppb
1000
1000
1000

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	592705	1.42	604198	98.10	30	120	
Ge	72	He	87762	0.96	81288	107.96	30	120	
Ge	72	H2	999255	1.30	933781	107.01	30	120	
In	115	He	780200	0.70	717634	108.72	30	120	
Lu	175	He	2354054	1.40	2064230	114.04	30	120	

Sample Report

Sample Table

Sample Name	K1605069-006
Data File Name	113SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T16:02:11-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	8.847	0.86	22319	0.04	
Ni	60	He	36.798	0.61	50939	0.07	
Ni	62	He	36.773	4.15	8073	0.46	
Cu	63	He	56.313	0.71	226937	0.02	
Cu	65	He	56.651	0.97	114713	0.05	
Zn	66	He	696.577	0.36	356156	0.20	
As	75	He	26.856	0.49	8635	0.31	
Se	77	H2	4.547	2.01	1471	0.31	
Se	78	H2	1.139	2.15	642	0.18	
Sb	121	He	0.870	5.07	1917	0.05	
Sb	123	He	0.879	7.59	1546	0.06	
[Pb]	206	He	100.794	1.97	645425	0.02	
[Pb]	207	He	88.183	1.23	503075	0.02	
Pb	208	He	94.147	1.45	2471380	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	581559	1.22	604198	96.25	30	120	
Ge	72	He	87434	0.28	81288	107.56	30	120	
Ge	72	H2	983124	1.36	933781	105.28	30	120	
In	115	He	768643	0.98	717634	107.11	30	120	
Lu	175	He	2415374	2.17	2064230	117.01	30	120	

Sample Report

Sample Table

Sample Name	K1605069-007
Data File Name	114SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T16:05:59-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	8.517	1.68	21463	0.04	
Ni	60	He	33.347	1.59	46651	0.07	
Ni	62	He	33.566	1.82	7447	0.45	
Cu	63	He	50.401	1.10	205225	0.02	
Cu	65	He	50.612	0.51	103561	0.05	
Zn	66	He	624.469	1.05	322614	0.19	
As	75	He	24.471	1.42	7950	0.31	
Se	77	H2	3.986	7.86	1377	0.29	
Se	78	H2	0.877	5.69	498	0.18	
Sb	121	He	0.749	2.59	1672	0.04	
Sb	123	He	0.780	3.69	1387	0.06	
[Pb]	206	He	91.166	1.80	573112	0.02	
[Pb]	207	He	78.224	0.90	438090	0.02	
Pb	208	He	84.121	0.96	2167846	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	580901	1.06	604198	96.14	30	120	
Ge	72	He	88344	0.76	81288	108.68	30	120	
Ge	72	H2	985648	0.84	933781	105.55	30	120	
In	115	He	773711	0.83	717634	107.81	30	120	
Lu	175	He	2370833	0.93	2064230	114.85	30	120	

Sample Report

Sample Table

Sample Name	K1605069-008
Data File Name	115SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T16:09:48-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	8.088	1.35	20283	0.04	
Ni	60	He	32.014	1.47	45256	0.07	
Ni	62	He	32.481	3.20	7282	0.45	
Cu	63	He	49.061	1.70	201844	0.02	
Cu	65	He	49.199	2.52	101701	0.05	
Zn	66	He	638.537	1.68	333280	0.19	
As	75	He	25.685	2.79	8430	0.30	
Se	77	H2	4.126	9.46	1405	0.29	
Se	78	H2	0.972	4.10	5S2	0.18	
Sb	121	He	0.768	1.32	1705	0.05	
Sb	123	He	0.783	5.93	1386	0.06	
[Pb]	206	He	87.299	1.52	559661	0.02	
[Pb]	207	He	75.193	2.49	429400	0.02	
Pb	208	He	80.816	2.21	2123644	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	578105	1.75	604198	95.68	30	120	
Ge	72	He	89266	1.16	81288	109.82	30	120	
Ge	72	H2	988533	1.29	933781	105.86	30	120	
In	115	He	769852	0.39	717634	107.28	30	120	
Lu	175	He	2417806	1.45	2064230	117.13	30	120	

Sample Report

Sample Table

Sample Name	K1605069-009
Data File Name	116SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T16:13:36-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	9.767	0.46	24185	0.04	
Ni	60	He	32.093	1.39	44707	0.07	
Ni	62	He	32.789	3.20	7245	0.45	
Cu	63	He	49.368	1.44	200147	0.02	
Cu	65	He	49.412	1.83	100658	0.05	
Zn	66	He	988.991	0.59	508670	0.19	
As	75	He	86.344	1.53	27914	0.31	
Se	77	H2	4.637	6.54	1488	0.31	
Se	78	H2	0.604	6.13	344	0.18	
Sb	121	He	1.000	3.67	2195	0.05	
Sb	123	He	1.026	3.40	1801	0.06	
[Pb]	206	He	137.899	1.97	856098	0.02	
[Pb]	207	He	128.542	0.89	710949	0.02	
Pb	208	He	140.403	1.87	3573008	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	570824	0.68	604198	94.48	30	120	
Ge	72	He	87959	0.54	81288	108.21	30	120	
Ge	72	H2	983799	1.71	933781	105.36	30	120	
In	115	He	769937	0.84	717634	107.29	30	120	
Lu	175	He	2341635	1.45	2064230	113.44	30	120	

Sample Report

Sample Table

Sample Name	K1605069-010
Data File Name	117SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T16:17:25-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	6.539	1.86	16118	0.04	
Ni	60	He	44.092	1.29	61931	0.07	
Ni	62	He	45.418	3.22	10113	0.45	
Cu	63	He	68.102	2.53	278533	0.02	
Cu	65	He	68.253	1.65	140275	0.05	
Zn	66	He	2315.621	1.81	1201627	0.19	
As	75	He	34.516	1.70	11263	0.31	
Se	77	H2	3.109	8.95	1218	0.26	
Se	78	H2	0.630	2.66	358	0.18	
Sb	121	He	0.976	0.97	2121	0.05	
Sb	123	He	1.002	5.02	1740	0.06	
[Pb]	206	He	186.268	1.52	1165481	0.02	
[Pb]	207	He	179.627	1.51	1001204	0.02	
Pb	208	He	191.101	1.69	4901337	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	568130	2.03	604198	94.03	30	120	
Ge	72	He	88759	1.11	81288	109.19	30	120	
Ge	72	H2	979377	3.12	933781	104.88	30	120	
In	115	He	761615	0.23	717634	106.13	30	120	
Lu	175	He	2360041	1.48	2064230	114.33	30	120	

Sample Report

Sample Table

Sample Name	K1605069-011
Data File Name	118SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T16:21:13-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	8.643	2.71	22681	0.04	
Ni	60	He	16.099	1.55	23326	0.07	
Ni	62	He	15.215	4.74	3503	0.43	
Cu	63	He	56.271	3.04	236572	0.02	
Cu	65	He	56.366	3.13	119074	0.05	
Zn	66	He	250.560	3.26	133677	0.19	
As	75	He	22.935	1.46	7696	0.30	
Se	77	H2	3.709	4.41	1363	0.27	
Se	78	H2	0.691	7.73	404	0.17	
Sb	121	He	0.653	3.45	1517	0.04	
Sb	123	He	0.697	3.59	1285	0.05	
[Pb]	206	He	87.504	1.61	563293	0.02	
[Pb]	207	He	82.735	2.01	474422	0.02	
Pb	208	He	85.543	1.54	2257267	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	604971	0.95	604198	100.13	30	120	
Ge	72	He	91255	2.17	81288	112.26	30	120	
Ge	72	H2	1010605	0.5B	933781	108.23	30	120	
In	115	He	798347	0.51	717634	111.25	30	120	
Lu	175	He	2427735	1.10	2064230	117.61	30	120	

Sample Report

Sample Table

Sample Name	K1605069-012
Data File Name	119SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T16:25:02-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	12.279	1.90	31982	0.04	
Ni	60	He	17.074	2.88	24601	0.07	
Ni	62	He	17.382	2.67	3979	0.44	
Cu	63	He	48.791	1.79	204150	0.02	
Cu	65	He	48.898	1.26	102804	0.05	
Zn	66	He	401.564	0.95	213183	0.19	
As	75	He	165.341	2.52	55150	0.30	
Se	77	H2	4.598	3.78	1502	0.31	
Se	78	H2	0.901	1.54	517	0.17	
Sb	121	He	0.890	4.42	2016	0.04	
Sb	123	He	0.903	3.27	1633	0.06	
[Pb]	206	He	74.002	1.12	472354	0.02	
[Pb]	207	He	69.142	1.59	393117	0.02	
Pb	208	He	71.807	1.21	1878763	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	600574	1.34	604198	99.40	30	120	
Ge	72	He	90784	1.52	81288	111.68	30	120	
Ge	72	H2	997695	1.03	933781	106.84	30	120	
In	115	He	790706	0.51	717634	110.18	30	120	
Lu	175	He	2407178	1.83	2064230	116.61	30	120	

Sample Report

Sample Table

Sample Name	LRSTD
Data File Name	120SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T16:28:54-07:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	0.005	24.02	28	0.02	
Ni	60	He	0.032	41.28	167	0.02	
Ni	62	He	0.040	225.70	40	0.10	
Cu	63	He	0.039	14.36	268	0.01	
Cu	65	He	0.029	9.92	114	0.03	
Zn	66	He	5172.586	2.27	2657722	0.19	>LDR
As	75	He	0.023	33.89	14	0.17	
Se	77	H2	0.036	136.29	706	0.01	
Se	78	H2	-0.001	-766.76	7	-0.01	
Sb	121	He	-0.021	-6.24	40	-0.05	
Sb	123	He	-0.011	-63.39	30	-0.04	
[Pb]	206	He	0.039	14.17	336	0.01	
[Pb]	207	He	0.052	5.65	367	0.01	
Pb	208	He	0.046	1.60	1539	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	580759	2.09	604198	96.12	30	120	
Ge	72	He	87888	1.02	81288	108.12	30	120	
Ge	72	H2	1004229	2.16	933781	107.54	30	120	
In	115	He	772381	0.71	717634	107.63	30	120	
Lu	175	He	2315480	1.15	2064230	112.17	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	121_CCV.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T16:33:29-07:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	24.944	1.527	62876	0.87	25	100	
Ni	60	He	24.994	2.497	34514	1.26	25	100	
Ni	62	He	25.183	4.737	5518	3.74	25	101	
Cu	63	He	24.559	0.855	98691	0.40	25	98	
Cu	65	He	24.725	1.778	49927	1.64	25	99	
Zn	66	He	25.310	0.609	12939	0.83	25	101	
As	75	He	25.091	1.395	8040	0.99	25	100	
Se	77	H2	24.930	1.764	5104	1.08	25	100	
Se	78	H2	24.855	3.297	14163	1.87	25	99	
Sb	121	He	25.151	1.985	52955	1.29	25	101	
Sb	123	He	24.981	0.980	42526	1.15	25	100	
[Pb]	206	He	22.473	1.444	138606	0.47	25	90	
[Pb]	207	He	22.773	2.025	125105	0.51	25	91	
Pb	208	He	22.671	1.648	573136	0.26	25	91	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	581398	1.77	604198	96.23	30	120	
Ge	72	He	87141	1.25	81288	107.20	30	120	
Ge	72	H2	1005268	1.51	933781	107.66	30	120	
In	115	He	767075	0.71	717634	106.89	30	120	
Lu	175	He	2325022	1.90	2064230	112.63	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	122_CCB.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T16:37:18-07:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	0.006	33.8	30	15.9	0.04	
Ni	60	He	0.008	117.4	118	1.6	0.2	
Ni	62	He	0.049	74.9	37	9.1	0.2	
Cu	63	He	0.022	28.8	172	4.9	0.2	
Cu	65	He	0.010	136.2	67	36.1	0.2	
Zn	66	He	0.373	22.5	208	15.4	1	
As	75	He	0.005	257.8	7	42.9	0.25	
Se	77	H2	0.052	170.9	704	0.6	20	
Se	78	H2	-0.001	-865.6	7	55.1	0.5	
Sb	121	He	0.011	63.9	95	20.2	0.2	
Sb	123	He	0.014	37.7	64	10.9	0.05	
[Pb]	206	He	0.014	29.1	160	2.1	0.1	
[Pb]	207	He	0.011	35.2	123	24.0	0.1	
Pb	208	He	0.013	19.7	608	3.6	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	550184	1.29	604198	91.06	30	120	
Ge	72	He	77914	10.32	81288	95.85	30	120	
Ge	72	H2	997459	2.17	933781	106.82	30	120	
In	115	He	677289	11.22	717634	94.38	30	120	
Lu	175	He	2043635	11.06	2064230	99.00	30	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLCCVS
Data File Name	123LCCV.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T16:41:09-07:00
Sample Type	LLCCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

See review 5/26/18

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	0.039	2.468	114	3.07	0.04	97	
Ni	60	He	0.430	1.827	726	1.16	0.4	108	
Ni	62	He	0.374	30.218	114	22.24	0.4	94	
Cu	63	He	0.225	2.099	1026	2.09	0.2	112	
Cu	65	He	0.214	2.474	494	1.95	0.2	107	
Zn	66	He	1.325	15.699	731	14.30	1	133	LLCCV Failed
As	75	He	0.994	3.375	330	2.89	1	99	
Se	77	H2	1.921	11.729	1056	3.60	2	96	
Se	78	H2	1.962	2.825	1143	3.22	2	98	
Sb	121	He	0.109	18.590	314	14.07	0.1	109	
Sb	123	He	0.120	9.855	253	7.47	0.1	120	
[Pb]	206	He	0.093	3.616	673	1.72	0.1	93	
[Pb]	207	He	0.102	14.471	642	12.06	0.1	102	
Pb	208	He	0.098	9.594	2852	7.66	0.1	98	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	581322	1.03	604198	96.21	30	120	
Ge	72	He	88598	0.41	81288	108.99	30	120	
Ge	72	H2	1020866	0.56	933781	109.33	30	120	
In	115	He	769439	0.48	717634	107.22	30	120	
Lu	175	He	2323764	2.05	2064230	112.57	30	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLCCVS
Data File Name	124LCCV.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T16:45:00-07:00
Sample Type	LLCCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	0.046	13.369	132	10.61	0.04	114	
Ni	60	He	0.425	3.155	718	2.29	0.4	106	
Ni	62	He	0.530	28.711	149	22.87	0.4	132	
Cu	63	He	0.208	6.995	960	6.28	0.2	104	
Cu	65	He	0.229	14.284	526	12.47	0.2	115	
Zn	66	He	1.189	7.482	661	7.15	1	119	
As	75	He	1.024	10.277	340	9.96	1	102	
Se	77	H2	2.104	4.367	1098	1.37	2	105	
Se	78	H2	1.922	3.517	1129	3.61	2	96	
Sb	121	He	0.098	3.536	290	1.52	0.1	98	
Sb	123	He	0.105	12.683	227	10.41	0.1	105	
[Pb]	206	He	0.105	7.552	747	7.09	0.1	105	
[Pb]	207	He	0.102	8.600	644	7.54	0.1	102	
Pb	208	He	0.101	5.684	2940	5.46	0.1	101	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	583217	1.05	604198	96.53	30	120	
Ge	72	He	88608	0.43	81288	109.01	30	120	
Ge	72	H2	1029253	0.44	933781	110.22	30	120	
In	115	He	765895	1.01	717634	106.72	30	120	
Lu	175	He	2338490	0.55	2064230	113.29	30	120	

Sample Report

Sample Table

Sample Name	K1605069-013
Data File Name	125SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T16:52:51-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	3.215	2.32	7961	0.04	
Ni	60	He	24.559	0.74	33246	0.07	
Ni	62	He	25.232	1.20	5420	0.47	
Cu	63	He	28.815	1.35	113469	0.03	
Cu	65	He	28.871	0.29	57130	0.05	
Zn	66	He	106.265	1.34	53104	0.20	
As	75	He	11.258	0.73	3539	0.32	
Se	77	H2	2.345	9.10	1056	0.22	
Se	78	H2	0.428	12.89	239	0.18	
Sb	121	He	0.442	2.61	982	0.05	
Sb	123	He	0.465	4.98	813	0.06	
[Pb]	206	He	42.768	2.19	257789	0.02	
[Pb]	207	He	40.834	2.20	219257	0.02	
Pb	208	He	41.816	1.99	1033200	0.00	

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QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	570205	2.13	604198	94.37	30	120	
Ge	72	He	85402	0.42	81288	105.06	30	120	
Ge	72	H2	952251	1.76	933781	101.98	30	120	
In	115	He	742470	0.38	717634	103.46	30	120	
Lu	175	He	2273106	1.84	2064230	110.12	30	120	

next
ccv at. see report

Sample Report

Sample Table

Sample Name	K1605069-014
Data File Name	126SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T16:56:39-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	12.825	1.04	32768	0.04	
Ni	60	He	20.703	0.88	29972	0.07	
Ni	62	He	20.930	2.22	4810	0.44	
Cu	63	He	32.495	1.04	136736	0.02	
Cu	65	He	32.759	2.22	69262	0.05	
Zn	66	He	144.803	1.73	77314	0.19	
As	75	He	10.942	0.82	3676	0.30	
Se	77	H2	5.643	1.91	1700	0.33	
Se	78	H2	1.216	4.76	701	0.17	
Sb	121	He	0.420	6.57	982	0.04	
Sb	123	He	0.442	12.27	813	0.05	
[Pb]	206	He	30.869	1.49	198729	0.02	
[Pb]	207	He	27.482	0.40	157617	0.02	
Pb	208	He	29.249	0.90	771852	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	589146	1.63	604198	97.51	30	120	
Ge	72	He	91271	0.91	81288	112.28	30	120	
Ge	72	H2	1006643	2.00	933781	107.80	30	120	
In	115	He	778935	0.36	717634	108.54	30	120	
Lu	175	He	2427031	1.88	2064230	117.58	30	120	

Sample Report

Sample Table

Sample Name	K1605069-015
Data File Name	127SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T17:00:28-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	7.632	1.88	19547	0.04	
Ni	60	He	16.492	1.05	24154	0.07	
Ni	62	He	16.713	1.37	3888	0.43	
Cu	63	He	33.628	0.52	143005	0.02	
Cu	65	He	34.033	0.98	72723	0.05	
Zn	66	He	110.412	0.12	59592	0.19	
As	75	He	15.197	1.56	5157	0.29	
Se	77	H2	5.475	3.92	1670	0.33	
Se	78	H2	1.040	8.21	601	0.17	
Sb	121	He	0.540	7.65	1246	0.04	
Sb	123	He	0.558	3.20	1019	0.05	
[Pb]	206	He	51.649	1.08	329444	0.02	
[Pb]	207	He	47.998	1.79	272710	0.02	
~~Pb~~	~~208~~	~~He~~	~~49.824~~	~~1.46~~	~~1302649~~	~~0.00~~	

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QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	590417	1.40	604198	97.72	30	120	
Ge	72	He	92235	0.15	81288	113.47	30	120	
Ge	72	H2	1006352	0.97	933781	107.77	30	120	
In	115	He	783360	0.95	717634	109.16	30	120	
Lu	175	He	2405180	1.30	2064230	116.52	30	120	

Sample Report

Sample Table

Sample Name	K1605069-016
Data File Name	128SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T17:04:18-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	7.566	1.24	19549	0.04	
Ni	60	He	16.366	1.52	24045	0.07	
Ni	62	He	15.794	2.78	3688	0.43	
Cu	63	He	34.357	0.56	146561	0.02	
Cu	65	He	34.570	1.05	74102	0.05	
Zn	66	He	113.967	1.35	61702	0.18	
As	75	He	15.363	0.58	5230	0.29	
Se	77	H2	5.337	3.85	1663	0.32	
Se	78	H2	1.029	3.61	602	0.17	
Sb	121	He	0.516	1.09	1204	0.04	
Sb	123	He	0.509	2.77	942	0.05	
[Pb]	206	He	50.801	0.78	329168	0.02	
[Pb]	207	He	47.185	1.02	272355	0.02	
Pb	208	He	49.235	1.08	1307663	0.00	

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QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	595559	1.59	604198	98.57	30	120	
Ge	72	He	92526	0.57	81288	113.82	30	120	
Ge	72	H2	1017538	2.27	933781	108.97	30	120	
In	115	He	790338	0.22	717634	110.13	30	120	
Lu	175	He	2443219	1.46	2064230	118.36	30	120	

Sample Report

Sample Table

Sample Name	K1605069-017
Data File Name	129SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T17:08:08-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	11.251	1.79	28588	0.04	
Ni	60	He	62.020	1.08	91415	0.07	
Ni	62	He	61.831	0.69	14445	0.43	
Cu	63	He	102.322	0.84	439407	0.02	
Cu	65	He	102.384	0.19	220929	0.05	
Zn	66	He	276.950	0.69	150951	0.18	
As	75	He	15.222	2.23	5219	0.29	
Se	77	H2	6.146	9.08	1804	0.34	
Se	78	H2	1.061	7.37	618	0.17	
Sb	121	He	0.429	4.36	1017	0.04	
Sb	123	He	0.490	6.31	909	0.05	
[Pb]	206	He	61.790	0.58	401473	0.02	
[Pb]	207	He	53.345	0.77	308743	0.02	
Pb	208	He	57.735	0.80	1537599	0.00	

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QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	585891	1.61	604198	96.97	30	120	
Ge	72	He	93193	0.71	81288	114.65	30	120	
Ge	72	H2	1015587	0.82	933781	108.76	30	120	
In	115	He	790991	0.41	717634	110.22	30	120	
Lu	175	He	2449881	0.99	2064230	118.68	30	120	

Sample Report

Sample Table

Sample Name	K1605069-018
Data File Name	130SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T17:11:57-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	17.255	1.59	45678	0.04	
Ni	60	He	23.931	1.52	36408	0.07	
Ni	62	He	23.745	3.37	5733	0.41	
Cu	63	He	30.821	1.23	136385	0.02	
Cu	65	He	31.173	1.04	69313	0.04	
Zn	66	He	160.888	0.89	90329	0.18	
As	75	He	10.603	2.32	3746	0.28	
Se	77	H2	7.087	5.15	1986	0.36	
Se	78	H2	1.315	8.39	770	0.17	
Sb	121	He	0.238	4.06	618	0.04	
Sb	123	He	0.266	9.42	530	0.05	
[Pb]	206	He	44.034	2.05	292401	0.02	
[Pb]	207	He	34.247	1.13	202604	0.02	
Pb	208	He	39.503	1.59	1075302	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	610497	1.57	604198	101.04	30	120	
Ge	72	He	95972	0.26	81288	118.06	30	120	
Ge	72	H2	1022374	0.84	933781	109.49	30	120	
In	115	He	809530	0.67	717634	112.81	30	120	
Lu	175	He	2503927	1.18	2064230	121.30	30	120	Flag

Sample Report

Sample Table

Sample Name	K1605069-019
Data File Name	131SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-0S-26T17:15:46-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	13.841	1.86	35232	0.04	
Ni	60	He	88.674	0.20	129007	0.07	
Ni	62	He	87.251	1.58	20114	0.43	
Cu	63	He	147.127	0.45	623817	0.02	
Cu	65	He	148.518	0.39	316416	0.05	
Zn	66	He	285.813	0.78	153821	0.19	
As	75	He	15.403	1.14	5215	0.30	
Se	77	H2	5.315	0.98	1659	0.32	
Se	78	H2	1.039	2.51	607	0.17	
Sb	121	He	0.452	2.13	1056	0.04	
Sb	123	He	0.462	7.12	852	0.05	
[Pb]	206	He	69.897	0.74	456453	0.02	
[Pb]	207	He	65.467	1.69	380801	0.02	
~~Pb~~	~~208~~	~~He~~	~~68.052~~	~~1.46~~	1821555	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	586951	0.64	604198	97.15	30	120	
Ge	72	He	92019	0.47	81288	113.20	30	120	
Ge	72	H2	1016996	1.52	933781	108.91	30	120	
In	115	He	782445	0.31	717634	109.03	30	120	
Lu	175	He	2462517	1.30	2064230	119.29	30	120	

Prep Blank (PB) Report

Sample Table

Sample Name	KQ1605183-01
Data File Name	132_PB.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T17:19:37-07:00
Sample Type	PB
Dilution	1
Comment	5
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

CD 5/27/16

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	0.003	14.1	26	4.5	0.04	
Ni	60	He	0.064	46.5	213	19.2	0.2	
Ni	62	He	0.018	128.9	36	14.3	0.2	
Cu	63	He	0.018	37.4	183	16.2	0.2	
Cu	65	He	0.033	60.1	124	33.5	0.2	
Zn	66	He	0.536	20.3	323	16.2	1	
As	75	He	0.001	596.7	7	37.8	0.25	
Se	77	H2	-0.119	-271.2	684	7.3	2	
Se	78	H2	-0.006	-73.9	5	53.9	0.5	
Sb	121	He	-0.016	-73.5	53	46.2	0.1	
Sb	123	He	-0.010	-54.2	33	29.8	0.05	
[Pb]	206	He	0.026	16.3	268	10.7	0.1	
[Pb]	207	He	0.019	54.7	190	31.0	0.1	
Pb	208	He	0.022	9.0	977	6.5	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	603986	2.00	604198	99.96	30	120	
Ge	72	He	88971	1.40	81288	109.45	30	120	
Ge	72	H2	1012076	2.07	933781	108.38	30	120	
In	115	He	791821	0.83	717634	110.34	30	120	
Lu	175	He	2408705	1.59	2064230	116.69	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	KQ1605183-02
Data File Name	133_LCS.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T17:23:26-07:00
Sample Type	LCS
Dilution	1
Comment	20
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

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QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	5.122	0.695	13271	0.96	5	102.4	
Ni	60	He	56.742	12.107	71569	2.11	50	113.5	
Ni	62	He	57.441	12.553	11481	2.58	50	114.9	
Cu	63	He	28.176	12.288	103586	2.29	25	112.7	
Cu	65	He	28.504	12.161	52660	2.24	25	114.0	
Zn	66	He	57.022	13.304	26604	3.24	50	114.0	
As	75	He	57.383	11.044	16830	1.64	50	114.8	
Se	77	H2	52.341	1.238	10028	2.12	50	104.7	
Se	78	H2	51.792	1.697	29747	0.69	50	103.6	
Sb	121	He	55.126	11.354	110948	2.55	50	110.3	
Sb	123	He	54.815	10.256	89264	1.60	50	109.6	
[Pb]	206	He	47.406	9.622	278248	2.32	50	94.8	
[Pb]	207	He	49.429	9.729	258426	2.55	50	98.9	
Pb	208	He	48.372	9.490	1163870	2.27	50	96.7	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	596907	0.54	604198	98.79	30	120	
Ge	72	He	80351	9.55	81288	98.85	30	120	
Ge	72	H2	1013372	1.01	933781	108.52	30	120	
In	115	He	738458	8.35	717634	102.90	30	120	
Lu	175	He	2222874	6.95	2064230	107.69	30	120	

Sample Report

Sample Table

Sample Name	K1604894-001
Data File Name	134SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T17:27:17-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

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QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	0.763	2.85	2034	0.04	
Ni	60	He	10.498	1.13	14971	0.07	
Ni	62	He	10.631	2.32	2412	0.44	
Cu	63	He	37.500	1.98	154776	0.02	
Cu	65	He	37.841	0.90	78483	0.05	
Zn	66	He	31.181	1.58	16370	0.19	
As	75	He	9.330	1.54	3076	0.30	
Se	77	H2	5.829	6.53	1730	0.34	
Se	78	H2	5.524	1.46	3152	0.18	
Sb	121	He	0.307	6.92	757	0.04	
Sb	123	He	0.310	14.57	598	0.05	
[Pb]	206	He	24.300	1.65	155507	0.02	
[Pb]	207	He	23.559	0.94	134297	0.02	
Pb	208	He	23.893	0.94	626760	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	609858	0.58	604198	100.94	30	120	
Ge	72	He	89536	0.77	81288	110.15	30	120	
Ge	72	H2	1004441	1.48	933781	107.57	30	120	
In	115	He	795122	0.59	717634	110.80	30	120	
Lu	175	He	2412219	1.27	2064230	116.86	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	135_CCV.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T17:31:06-07:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	25.118	1.432	63779	0.29	25	100	
Ni	60	He	24.279	1.323	34353	1.50	25	97	
Ni	62	He	24.483	2.571	5498	2.80	25	98	
Cu	63	He	24.283	0.543	99964	0.39	25	97	
Cu	65	He	24.246	1.193	50153	1.10	25	97	
Zn	66	He	23.416	1.190	12266	0.95	25	94	
As	75	He	25.222	1.071	8279	1.07	25	101	
Se	77	H2	24.943	1.511	5181	1.96	25	100	
Se	78	H2	24.244	1.573	14018	1.45	25	97	
Sb	121	He	24.725	0.634	52709	0.30	25	99	
Sb	123	He	24.755	0.380	42666	1.09	25	99	
[Pb]	206	He	21.792	2.331	137092	0.48	25	87	CCV Failed
[Pb]	207	He	21.850	2.519	122441	0.78	25	87	CCV Failed
Pb	208	He	21.860	2.167	563710	0.39	25	87	CCV Failed

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	585636	1.15	604198	96.93	30	120	
Ge	72	He	89259	0.24	81288	109.81	30	120	
Ge	72	H2	1019748	0.65	933781	109.21	30	120	
In	115	He	776572	0.71	717634	108.21	30	120	
Lu	175	He	2371724	2.11	2064230	114.90	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	136_CCV.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T17:34:55-07:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

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QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	25.179	2.518	63538	0.98	25	101	
Ni	60	He	24.406	1.554	34075	1.97	25	98	
Ni	62	He	25.115	3.527	5563	3.32	25	100	
Cu	63	He	24.462	1.010	99359	0.77	25	98	
Cu	65	He	24.634	0.614	50278	0.98	25	99	
Zn	66	He	24.141	3.086	12476	2.89	25	97	
As	75	He	25.160	0.242	8149	0.66	25	101	
Se	77	H2	24.919	0.248	5159	0.75	25	100	
Se	78	H2	24.521	1.451	14131	1.10	25	98	
Sb	121	He	24.832	0.292	52304	0.33	25	99	
Sb	123	He	25.144	0.091	42814	0.21	25	101	
[Pb]	206	He	21.998	1.874	137530	0.52	25	88	CCV Failed
[Pb]	207	He	22.096	1.438	123055	0.11	25	88	CCV Failed
Pb	208	He	21.933	1.339	562086	0.27	25	88	CCV Failed

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	582099	1.80	604198	96.34	30	120	
Ge	72	He	88072	0.46	81288	108.35	30	120	
Ge	72	H2	1016375	0.54	933781	108.85	30	120	
In	115	He	767263	0.14	717634	106.92	30	120	
Lu	175	He	2356672	1.54	2064230	114.17	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	137_CCV.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T17:38:46-07:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

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QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	25.023	0.733	59687	0.25	25	100	
Ni	60	He	24.515	1.276	32584	1.09	25	98	
Ni	62	He	24.529	0.613	5174	1.23	25	98	
Cu	63	He	24.227	0.493	93693	1.19	25	97	
Cu	65	He	24.497	0.857	47604	1.05	25	98	
Zn	66	He	24.104	0.450	11861	1.25	25	96	
As	75	He	24.959	2.365	7696	1.26	25	100	
Se	77	H2	29.713	23.056	5026	1.41	25	119	
Se	78	H2	28.870	22.370	13867	3.02	25	115	CCV Failed
Sb	121	He	25.115	1.811	50480	0.82	25	100	
Sb	123	He	25.210	0.834	40968	0.63	25	101	
[Pb]	206	He	22.022	1.562	131220	0.93	25	88	CCV Failed
[Pb]	207	He	22.121	1.359	117415	1.18	25	88	CCV Failed
Pb	208	He	22.171	1.632	541512	0.52	25	89	CCV Failed

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	550108	0.88	604198	91.05	30	120	
Ge	72	He	83855	1.21	81288	103.16	30	120	
Ge	72	H2	869490	17.23	933781	93.11	30	120	
In	115	He	732275	0.99	717634	102.04	30	120	
Lu	175	He	2246105	1.71	2064230	108.81	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	138_CCB.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T17:42:36-07:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	0.009	37.7	39	20.5	0.04	
Ni	60	He	0.012	184.4	139	22.2	0.2	
Ni	62	He	0.061	117.1	44	34.6	0.2	
Cu	63	He	0.007	112.4	136	22.3	0.2	
Cu	65	He	0.013	123.3	81	38.8	0.2	
Zn	66	He	0.033	123.3	61	33.3	1	
As	75	He	0.010	20.9	10	6.0	0.25	
Se	77	H2	-0.180	-146.6	665	6.4	20	
Se	78	H2	0.001	266.2	9	24.0	0.5	
Sb	121	He	0.006	75.5	98	10.6	0.2	
Sb	123	He	0.015	16.0	75	5.9	0.05	
[Pb]	206	He	0.007	84.1	142	25.1	0.1	
[Pb]	207	He	0.008	76.5	127	27.5	0.1	
Pb	208	He	0.009	41.7	611	15.4	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	589904	1.83	604198	97.63	30	120	
Ge	72	He	87752	0.97	81288	107.95	30	120	
Ge	72	H2	999365	1.11	933781	107.02	30	120	
In	115	He	775446	0.61	717634	108.06	30	120	
Lu	175	He	2363714	0.37	2064230	114.51	30	120	

Sample Report

Sample Table

Sample Name	K1604894-001D
Data File Name	139SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T17:46:26-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	0.684	3.67	1782	0.04	
Ni	60	He	11.243	2.03	15844	0.07	
Ni	62	He	11.051	3.75	2478	0.45	
Cu	63	He	35.480	1.52	144813	0.02	
Cu	65	He	36.235	2.05	74310	0.05	
Zn	66	He	27.844	3.07	14456	0.19	
As	75	He	9.435	2.57	3077	0.31	
Se	77	H2	6.455	4.31	1824	0.35	
Se	78	H2	6.136	3.32	3470	0.18	
Sb	121	He	0.495	5.20	1157	0.04	
Sb	123	He	0.477	7.17	885	0.05	
[Pb]	206	He	24.629	1.96	156906	0.02	
[Pb]	207	He	23.987	1.45	136131	0.02	
Pb	208	He	24.163	1.30	631018	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	595588	1.75	604198	98.58	30	120	
Ge	72	He	88536	0.98	81288	108.92	30	120	
Ge	72	H2	996153	1.65	933781	106.68	30	120	
In	115	He	789971	0.64	717634	110.08	30	120	
Lu	175	He	2401529	0.91	2064230	116.34	30	120	

Sample Report

Sample Table

Sample Name	K1604894-001L
Data File Name	140SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T17:50:16-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

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QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	0.157	8.16	410	0.04	
Ni	60	He	2.142	2.20	3127	0.07	
Ni	62	He	2.089	18.04	496	0.42	
Cu	63	He	7.648	0.34	31381	0.02	
Cu	65	He	7.480	0.66	15424	0.05	
Zn	66	He	6.352	3.79	3341	0.19	
As	75	He	1.970	2.41	649	0.30	
Se	77	H2	1.206	12.37	912	0.13	
Se	78	H2	1.120	3.04	644	0.17	
Sb	121	He	0.046	25.49	182	0.03	
Sb	123	He	0.060	7.90	151	0.04	
[Pb]	206	He	5.011	1.21	31389	0.02	
[Pb]	207	He	4.790	2.67	26722	0.02	
Pb	208	He	4.872	1.37	125076	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	580138	0.37	604198	96.02	30	120	
Ge	72	He	88758	0.68	81288	109.19	30	120	
Ge	72	H2	1002637	1.00	933781	107.37	30	120	
In	115	He	769244	1.03	717634	107.19	30	120	
Lu	175	He	2354929	0.64	2064230	114.08	30	120	

Sample Report

Sample Table

Sample Name	K1604894-001A
Data File Name	141SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T17:54:05-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	51.412	1.90	134295	0.04	
Ni	60	He	56.153	7.84	81611	0.07	
Ni	62	He	56.026	8.37	12906	0.43	
Cu	63	He	81.999	7.87	347217	0.02	
Cu	65	He	81.853	6.80	174198	0.05	
Zn	66	He	76.068	8.00	40902	0.19	
As	75	He	55.627	6.51	18794	0.30	
Se	77	H2	58.018	1.66	10749	0.54	
Se	78	H2	56.209	0.12	31440	0.18	
Sb	121	He	46.328	6.00	103293	0.04	
Sb	123	He	46.070	6.51	83059	0.06	
[Pb]	206	He	64.864	5.65	420542	0.02	
[Pb]	207	He	64.172	4.36	370630	0.02	
Pb	208	He	64.485	5.05	1713675	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	602566	1.48	604198	99.73	30	120	
Ge	72	He	92069	4.74	81288	113.26	30	120	
Ge	72	H2	986782	1.64	933781	105.68	30	120	
In	115	He	813813	4.00	717634	113.40	30	120	
Lu	175	He	2445746	2.71	2064230	118.48	30	120	

Sample Report

Sample Table

Sample Name	K1604894-001S
Data File Name	142SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T17:57:54-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

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QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	20.394	0.11	52383	0.04	
Ni	60	He	198.454	0.92	280157	0.07	
Ni	62	He	200.094	0.32	44745	0.45	
Cu	63	He	126.524	0.49	520882	0.02	
Cu	65	He	126.745	1.09	262179	0.05	
Zn	66	He	216.400	0.95	113086	0.19	
As	75	He	200.043	0.45	65683	0.30	
Se	77	H2	202.461	2.48	36170	0.56	
Se	78	H2	198.192	1.51	111999	0.18	
Sb	121	He	115.114	1.26	246769	0.05	
Sb	123	He	114.419	0.13	198366	0.06	
[Pb]	206	He	193.892	1.44	1225659	0.02	
[Pb]	207	He	200.054	1.80	1126443	0.02	
Pb	208	He	206.530	1.67	5351246	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	592308	0.99	604198	98.03	30	120	
Ge	72	He	89345	1.04	81288	109.91	30	120	
Ge	72	H2	997274	1.48	933781	106.80	30	120	
In	115	He	781895	0.28	717634	108.95	30	120	
Lu	175	He	2384259	1.72	2064230	115.50	30	120	

Sample Report

Sample Table

Sample Name	K1604894-002
Data File Name	143SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T18:01:42-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

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QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	0.044	9.73	127	0.03	
Ni	60	He	0.785	5.22	1176	0.07	
Ni	62	He	0.707	5.18	181	0.39	
Cu	63	He	0.676	5.17	2761	0.02	
Cu	65	He	0.740	5.21	1515	0.05	
Zn	66	He	2.398	1.62	1239	0.19	
As	75	He	1.304	4.83	415	0.31	
Se	77	H2	8.583	4.08	2121	0.40	
Se	78	H2	0.095	44.03	59	0.16	
Sb	121	He	0.079	8.69	246	0.03	
Sb	123	He	0.099	3.75	216	0.05	
[Pb]	206	He	1.464	3.13	9217	0.02	
[Pb]	207	He	1.187	5.17	6666	0.02	
Pb	208	He	1.232	2.00	31837	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	577988	1.66	604198	95.66	30	120	
Ge	72	He	85294	0.73	81288	104.93	30	120	
Ge	72	H2	961444	1.52	933781	102.96	30	120	
In	115	He	756859	0.73	717634	105.47	30	120	
Lu	175	He	2349043	0.53	2064230	113.80	30	120	

Sample Report

Sample Table

Sample Name	K1604894-003
Data File Name	144SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T18:05:32-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	0.058	8.61	172	0.03	
Ni	60	He	0.895	9.28	1400	0.06	
Ni	62	He	0.893	24.20	233	0.38	
Cu	63	He	0.360	7.09	1606	0.02	
Cu	65	He	0.431	7.40	957	0.05	
Zn	66	He	8.821	3.06	4694	0.19	
As	75	He	0.772	1.57	262	0.29	
Se	77	H2	5.783	5.52	1746	0.33	
Se	78	H2	0.026	72.74	23	0.11	
Sb	121	He	0.029	5.15	148	0.02	
Sb	123	He	0.034	9.44	109	0.03	
[Pb]	206	He	0.976	4.99	6297	0.02	
[Pb]	207	He	0.942	2.33	5415	0.02	
Pb	208	He	0.962	1.61	25437	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	618257	1.10	604198	102.33	30	120	
Ge	72	He	90130	0.97	81288	110.88	30	120	
Ge	72	H2	1019178	2.01	933781	109.15	30	120	
In	115	He	779220	0.46	717634	108.58	30	120	
Lu	175	He	2395326	1.74	2064230	116.04	30	120	

Sample Report

Sample Table

Sample Name	K1604894-004
Data File Name	145SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T18:09:21-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

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QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	0.982	1.78	2452	0.04	
Ni	60	He	0.204	28.96	397	0.05	
Ni	62	He	0.225	32.71	79	0.29	
Cu	63	He	1.023	3.40	4157	0.02	
Cu	65	He	1.085	3.75	2213	0.05	
Zn	66	He	19.687	1.13	9938	0.20	
As	75	He	2.030	6.94	647	0.31	
Se	77	H2	0.600	17.51	766	0.08	
Se	78	H2	0.048	18.21	34	0.14	
Sb	121	He	0.025	23.81	133	0.02	
Sb	123	He	0.043	42.26	120	0.04	
[Pb]	206	He	3.738	1.67	23639	0.02	
[Pb]	207	He	3.749	3.22	21110	0.02	
Pb	208	He	3.722	1.86	96450	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	572404	1.65	604198	94.74	30	120	
Ge	72	He	85958	1.05	81288	105.75	30	120	
Ge	72	H2	954713	1.31	933781	102.24	30	120	
In	115	He	749266	0.76	717634	104.41	30	120	
Lu	175	He	2375358	1.29	2064230	115.07	30	120	

Sample Report

Sample Table

Sample Name	K1604894-005
Data File Name	146SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T18:13:11-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

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QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	0.014	33.39	43	0.03	
Ni	60	He	2.652	1.93	3834	0.07	
Ni	62	He	2.512	3.64	588	0.43	
Cu	63	He	0.982	4.09	4117	0.02	
Cu	65	He	0.977	7.75	2060	0.05	
Zn	66	He	0.950	5.55	537	0.18	
As	75	He	0.268	20.57	94	0.29	
Se	77	H2	0.226	60.85	715	0.03	
Se	78	H2	0.024	8.32	21	0.12	
Sb	121	He	-0.006	-88.36	71	-0.01	
Sb	123	He	0.010	64.54	66	0.01	
[Pb]	206	He	0.203	8.27	1365	0.01	
[Pb]	207	He	0.199	5.52	1189	0.02	
Pb	208	He	0.201	2.48	5518	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	498612	15.76	604198	82.52	30	120	
Ge	72	He	88578	0.55	81288	108.97	30	120	
Ge	72	H2	970954	1.24	933781	103.98	30	120	
In	115	He	766272	0.53	717634	106.78	30	120	
Lu	175	He	2352250	1.40	2064230	113.95	30	120	

Sample Report

Sample Table

Sample Name	K1604894-006
Data File Name	147SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T18:17:02-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	0.006	82.66	30	0.02	
Ni	60	He	0.999	3.24	1486	0.07	
Ni	62	He	0.833	1.09	211	0.39	
Cu	63	He	0.105	17.31	524	0.02	
Cu	65	He	0.083	13.04	221	0.04	
Zn	66	He	2.743	3.09	1432	0.19	
As	75	He	0.086	12.47	34	0.25	
Se	77	H2	0.197	110.49	692	0.03	
Se	78	H2	0.094	10.06	58	0.16	
Sb	121	He	-0.017	-26.75	48	-0.04	
Sb	123	He	-0.010	-30.39	31	-0.03	
[Pb]	206	He	0.068	3.79	519	0.01	
[Pb]	207	He	0.059	7.16	408	0.01	
Pb	208	He	0.062	5.59	1957	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	573393	1.68	604198	94.90	30	120	
Ge	72	He	86568	1.15	81288	106.50	30	120	
Ge	72	H2	946506	1.74	933781	101.36	30	120	
In	115	He	747650	1.42	717634	104.18	30	120	
Lu	175	He	2339113	0.94	2064230	113.32	30	120	

Sample Report

Sample Table

Sample Name	K1604894-007
Data File Name	148SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T18:20:50-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	0.015	35.57	57	0.03	
Ni	60	He	0.256	5.63	498	0.05	
Ni	62	He	0.237	27.49	87	0.27	
Cu	63	He	0.496	2.59	2201	0.02	
Cu	65	He	0.508	2.99	1133	0.04	
Zn	66	He	0.497	13.48	312	0.16	
As	75	He	0.320	10.37	114	0.28	
Se	77	H2	0.225	73.20	755	0.03	
Se	78	H2	0.003	241.41	10	0.03	
Sb	121	He	-0.001	-589.44	88	0.00	
Sb	123	He	0.010	100.88	70	0.01	
[Pb]	206	He	0.180	1.24	1283	0.01	
[Pb]	207	He	0.148	2.32	934	0.02	
Pb	208	He	0.171	1.21	5018	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	616503	1.06	604198	102.04	30	120	
Ge	72	He	91470	1.01	81288	112.53	30	120	
Ge	72	H2	1025288	1.43	933781	109.80	30	120	
In	115	He	812330	1.09	717634	113.20	30	120	
Lu	175	He	2476449	1.26	2064230	119.97	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	149_CCV.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T18:24:41-07:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	25.136	0.881	64924	0.65	25	101	
Ni	60	He	24.037	0.982	35053	1.62	25	96	
Ni	62	He	23.579	3.403	5456	2.73	25	94	
Cu	63	He	23.725	2.013	100644	1.37	25	95	
Cu	65	He	23.972	1.074	51102	1.14	25	96	
Zn	66	He	23.998	2.825	12953	2.40	25	96	
As	75	He	24.637	0.408	8335	1.31	25	99	
Se	77	H2	24.533	2.326	5189	2.70	25	98	
Se	78	H2	24.232	3.132	14231	1.49	25	97	
Sb	121	He	24.843	1.291	54029	1.20	25	99	
Sb	123	He	24.658	0.507	43355	0.68	25	99	
[Pb]	206	He	21.933	1.975	140117	0.53	25	88	CCV Failed
[Pb]	207	He	22.136	0.890	125983	0.58	25	89	CCV Failed
Pb	208	He	22.039	1.346	577152	0.16	25	88	CCV Failed

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	595692	1.50	604198	98.59	30	120	
Ge	72	He	91989	0.99	81288	113.17	30	120	
Ge	72	H2	1036188	2.43	933781	110.97	30	120	
In	115	He	792235	0.19	717634	110.40	30	120	
Lu	175	He	2408211	1.43	2064230	116.66	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	150_CCB.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T18:28:31-07:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	0.007	20.6	35	12.0	0.04	
Ni	60	He	-0.003	-593.5	117	21.6	0.2	
Ni	62	He	0.045	256.8	40	60.1	0.2	
Cu	63	He	0.023	20.0	197	7.8	0.2	
Cu	65	He	0.018	47.7	91	20.1	0.2	
Zn	66	He	0.033	125.1	60	33.3	1	
As	75	He	0.010	96.0	10	33.3	0.25	
Se	77	H2	0.103	181.0	694	6.0	20	
Se	78	H2	0.009	53.2	12	18.7	0.5	
Sb	121	He	0.003	222.7	89	16.3	0.2	
Sb	123	He	0.016	73.2	76	26.3	0.05	
[Pb]	206	He	0.012	24.6	174	11.0	0.1	
[Pb]	207	He	0.018	17.6	181	9.3	0.1	
Pb	208	He	0.014	6.6	742	2.7	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	584232	1.63	604198	96.70	30	120	
Ge	72	He	86359	1.47	81288	106.24	30	120	
Ge	72	H2	969478	1.73	933781	103.82	30	120	
In	115	He	755183	0.24	717634	105.23	30	120	
Lu	175	He	2330283	0.71	2064230	112.89	30	120	

Sample Report

Sample Table

Sample Name	K1604894-008
Data File Name	151SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T18:32:20-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	1.234	2.31	2942	0.04	
Ni	60	He	8.702	0.84	11447	0.08	
Ni	62	He	8.831	5.87	1850	0.48	
Cu	63	He	9.859	1.49	37546	0.03	
Cu	65	He	9.847	2.45	18844	0.05	
Zn	66	He	21.347	1.49	10332	0.21	
As	75	He	20.070	0.95	6087	0.33	
Se	77	H2	0.480	42.17	745	0.06	
Se	78	H2	0.103	18.71	63	0.16	
Sb	121	He	1.879	3.64	3770	0.05	
Sb	123	He	1.859	1.58	3002	0.06	
[Pb]	206	He	14.305	1.07	84333	0.02	
[Pb]	207	He	14.041	0.81	73738	0.02	
Pb	208	He	13.775	1.71	332851	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	547344	2.47	604198	90.59	30	120	
Ge	72	He	82448	0.76	81288	101.43	30	120	
Ge	72	H2	953280	0.56	933781	102.09	30	120	
In	115	He	717150	0.80	717634	99.93	30	120	
Lu	175	He	2221451	2.34	2064230	107.62	30	120	

Sample Report

Sample Table

Sample Name	K1604894-009
Data File Name	152SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T18:36:10-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

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QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	0.063	1.51	155	0.04	
Ni	60	He	1.809	4.13	2385	0.08	
Ni	62	He	1.806	9.36	388	0.47	
Cu	63	He	9.194	1.21	33804	0.03	
Cu	65	He	9.435	2.44	17431	0.05	
Zn	66	He	120.393	0.41	56061	0.21	
As	75	He	18.938	1.92	5544	0.34	
Se	77	H2	35.347	4.98	6040	0.59	
Se	78	H2	33.668	3.42	16690	0.20	
Sb	121	He	0.960	3.84	1921	0.05	
Sb	123	He	0.995	4.57	1591	0.06	
[Pb]	206	He	30.026	1.13	178365	0.02	
[Pb]	207	He	18.895	0.33	100020	0.02	
Pb	208	He	22.006	1.08	535929	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	513966	2.62	604198	85.07	30	120	
Ge	72	He	79583	0.41	81288	97.90	30	120	
Ge	72	H2	874703	1.60	933781	93.67	30	120	
In	115	He	700738	1.01	717634	97.65	30	120	
Lu	175	He	2239448	0.98	2064230	108.49	30	120	

Sample Report

Sample Table

Sample Name	K1604894-010
Data File Name	153SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T18:39:59-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	0.024	14.56	71	0.03	
Ni	60	He	0.327	2.97	550	0.06	
Ni	62	He	0.240	18.78	80	0.30	
Cu	63	He	0.432	8.67	1770	0.02	
Cu	65	He	0.450	11.56	926	0.05	
Zn	66	He	14.056	2.12	6927	0.20	
As	75	He	0.443	3.89	143	0.31	
Se	77	H2	1.350	16.40	873	0.15	
Se	78	H2	0.290	10.51	161	0.18	
Sb	121	He	0.012	17.64	106	0.01	
Sb	123	He	0.023	31.59	86	0.03	
[Pb]	206	He	0.419	1.74	2720	0.02	
[Pb]	207	He	0.382	11.89	2209	0.02	
Pb	208	He	0.394	2.19	10486	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	542346	2.28	604198	89.76	30	120	
Ge	72	He	83767	0.84	81288	103.05	30	120	
Ge	72	H2	933624	1.40	933781	99.98	30	120	
In	115	He	745315	0.88	717634	103.86	30	120	
Lu	175	He	2359340	1.03	2064230	114.30	30	120	

Sample Report

Sample Table

Sample Name	K1604894-011
Data File Name	154SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T18:43:48-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CAL8.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	0.004	94.48	27	0.02	
Ni	60	He	0.945	5.88	1438	0.07	
Ni	62	He	0.903	28.08	230	0.39	
Cu	63	He	3.799	0.46	15529	0.02	
Cu	65	He	3.854	3.69	7916	0.05	
Zn	66	He	35.276	1.37	18220	0.19	
As	75	He	0.482	10.37	163	0.30	
Se	77	H2	0.248	162.20	735	0.03	
Se	78	H2	-0.004	-149.76	5	-0.08	
Sb	121	He	-0.016	-23.80	51	-0.03	
Sb	123	He	-0.005	-95.45	41	-0.01	
[Pb]	206	He	0.021	21.32	237	0.01	
[Pb]	207	He	0.026	8.52	232	0.01	
Pb	208	He	0.023	11.40	993	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	585029	1.48	604198	96.83	30	120	
Ge	72	He	88126	1.15	81288	108.41	30	120	
Ge	72	H2	993381	1.39	933781	106.38	30	120	
In	115	He	787765	0.53	717634	109.77	30	120	
Lu	175	He	2422453	1.26	2064230	117.35	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	155_CCV.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T18:47:39-07:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	24.888	1.387	62499	0.22	25	100	
Ni	60	He	24.027	2.085	33708	2.48	25	96	
Ni	62	He	24.334	2.698	5418	3.03	25	97	
Cu	63	He	23.932	0.406	97675	0.37	25	96	
Cu	65	He	24.211	0.662	49654	1.00	25	97	
Zn	66	He	23.092	2.015	11993	1.83	25	92	
As	75	He	24.801	1.161	8072	1.15	25	99	
Se	77	H2	25.151	1.245	5065	0.58	25	101	
Se	78	H2	24.486	2.330	13742	0.93	25	98	
Sb	121	He	25.083	1.087	53196	0.46	25	100	
Sb	123	He	24.958	0.883	42792	0.50	25	100	
[Pb]	206	He	21.733	1.352	137927	0.50	25	87	CCV Failed
[Pb]	207	He	21.780	1.436	123124	0.46	25	87	CCV Failed
Pb	208	He	21.749	1.376	565789	0.43	25	87	CCV Failed

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	579203	1.46	604198	95.86	30	120	
Ge	72	He	88496	0.40	81288	108.87	30	120	
Ge	72	H2	990003	1.41	933781	106.02	30	120	
In	115	He	772620	1.28	717634	107.66	30	120	
Lu	175	He	2392147	1.18	2064230	115.89	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	156_CCB.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T18:51:29-07:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	0.004	15.9	26	6.0	0.04	
Ni	60	He	0.005	347.4	123	18.9	0.2	
Ni	62	He	-0.019	-129.2	26	19.9	0.2	
Cu	63	He	0.008	51.8	134	12.5	0.2	
Cu	65	He	0.017	67.5	86	25.0	0.2	
Zn	66	He	0.011	87.5	48	10.7	1	
As	75	He	-0.001	-1710.1	6	44.1	0.25	
Se	77	H2	0.491	64.5	482	43.4	20	
Se	78	H2	0.021	102.6	10	20.0	0.5	
Sb	121	He	0.005	57.9	91	5.9	0.2	
Sb	123	He	0.018	46.2	76	17.7	0.05	
[Pb]	206	He	0.006	59.3	132	16.2	0.1	
[Pb]	207	He	0.003	71.1	98	13.8	0.1	
Pb	208	He	0.008	14.4	570	5.1	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	558035	2.06	604198	92.36	30	120	
Ge	72	He	83503	1.11	81288	102.72	30	120	
Ge	72	H2	629195	48.07	933781	67.38	30	120	
In	115	He	737382	0.41	717634	102.75	30	120	
Lu	175	He	2295476	0.30	2064230	111.20	30	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLCCVS
Data File Name	157LCCV.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T18:55:19-07:00
Sample Type	LLCCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	0.043	13.895	124	11.30	0.04	107	
Ni	60	He	0.484	12.738	783	11.04	0.4	121	
Ni	62	He	0.422	14.736	122	11.02	0.4	105	
Cu	63	He	0.211	2.602	951	1.42	0.2	106	
Cu	65	He	0.217	7.239	490	5.81	0.2	109	
Zn	66	He	1.126	15.098	614	13.23	1	113	
As	75	He	0.974	1.268	317	1.62	1	97	
Se	77	H2	2.340	12.649	1087	4.98	2	117	
Se	78	H2	1.918	1.447	1073	1.44	2	96	
Sb	121	He	0.126	8.829	348	6.54	0.1	126	
Sb	123	He	0.112	7.207	239	6.32	0.1	112	
[Pb]	206	He	0.107	13.387	774	11.52	0.1	107	
[Pb]	207	He	0.103	8.294	658	6.99	0.1	103	
Pb	208	He	0.101	9.806	2981	8.44	0.1	101	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	581862	0.76	604198	96.30	30	120	
Ge	72	He	86721	0.98	81288	106.68	30	120	
Ge	72	H2	980614	1.20	933781	105.02	30	120	
In	115	He	763617	0.61	717634	106.41	30	120	
Lu	175	He	2369122	0.33	2064230	114.77	30	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLCCVS 2X
Data File Name	158_QC1.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T18:59:07-07:00
Sample Type	QC1
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	0.071	8.335	193	8.34	0.08	89	
Ni	60	He	0.847	2.886	1281	2.47	0.8	106	
Ni	62	He	0.878	20.299	221	17.47	0.8	110	
Cu	63	He	0.401	5.679	1707	5.96	0.4	100	
Cu	65	He	0.430	11.777	917	10.84	0.4	107	
Zn	66	He	2.009	8.889	1062	8.48	2	100	
As	75	He	1.907	8.740	614	9.17	2	95	
Se	77	H2	4.110	7.011	1385	4.28	4	103	
Se	78	H2	3.857	1.929	2140	1.62	4	96	
Sb	121	He	0.195	10.557	493	8.84	0.2	97	
Sb	123	He	0.212	12.251	409	10.41	0.2	106	
[Pb]	206	He	0.181	9.157	1243	8.13	0.2	91	
[Pb]	207	He	0.188	14.667	1138	13.48	0.2	94	
Pb	208	He	0.175	0.832	4924	0.24	0.2	88	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	575749	0.99	604198	95.29	30	120	
Ge	72	He	86703	0.73	81288	106.66	30	120	
Ge	72	H2	975660	0.77	933781	104.48	30	120	
In	115	He	766277	0.36	717634	106.78	30	120	
Lu	175	He	2380552	0.65	2064230	115.32	30	120	

Sample Report

Sample Table

Sample Name	LLCCVS 1.0 ppb
Data File Name	159SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T19:02:56-07:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	1.040	3.21	2S87	0.04	
Ni	60	He	1.027	7.98	1S07	0.07	
Ni	62	He	1.085	17.93	262	0.41	
Cu	63	He	1.083	1.46	4374	0.02	
Cu	65	He	1.076	3.80	2186	0.05	
Zn	66	He	1.233	5.02	660	0.19	
As	75	He	0.979	7.06	314	0.31	
Se	77	H2	1.186	12.51	877	0.14	
Se	78	H2	1.006	5.14	560	0.18	
Sb	121	He	0.883	1.32	1927	0.05	
Sb	123	He	0.953	4.52	16S7	0.06	
[Pb]	206	He	0.926	5.23	5831	0.02	
[Pb]	207	He	0.934	1.72	5233	0.02	
Pb	208	He	0.913	1.84	23556	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	570177	0.78	604198	94.37	30	120	
Ge	72	He	85560	1.23	81288	105.26	30	120	
Ge	72	H2	968087	1.20	933781	103.67	30	120	
In	115	He	761607	0.28	717634	106.13	30	120	
Lu	175	He	2335082	0.92	2064230	113.12	30	120	

Service Request #	K1605069 (Pb reruns)		
Calibration	052716AMS05		
QC in calibration	052716AMS05		
QC Service Request #	K1605069		
STARLIMS run #	498408		
CAL STD	MS20-41-J		MS20-39-D
ICV STD	MS20-39-C	ICSAB STD	MS20-39-E
LLICV STD	MS20-40-D	INT STD	MS20-29-I

6020 DOD Data Review Form

	Yes	No	NA
1. Mass calibration <0.1 amu?	X		
2. Resolution <0.9 amu at 10% peak height?	X		
3. Stability RSD ≤5% for five replicates?	X		
4. Appropriate standardization completed?	X		
5. ICV within 10% of true value?	X		
6. CCV's within 10% of true?	X		
7. ICB/CCB's <LOD?	X		
8. Initial Low-level cal. check ± 20%	X		
9. ICSA/ICSAB within ± 20%	X		
10. Method blank <½ the LOQ?	X		
11. LCS within 80-120% DoD limit?	X		
12. Spikes within 80-120% DoD limit?	X		
13. Duplicate Spike RPD <20% DoD limit?	X		
14. Serial dilution within 10%?	X		
15. Post spike within 80-120% DoD limit?	X		
16. Internal standards within 30-120%?	X		
17. Linear range established with High CCV?	X		
18. Adequate rinse out time allowed?	X		
19. Interferences checked?	X		
20. Se over MRL?		X	
21. Cd Correction Applied?		X	
22. Was run prematurely stopped, If so why?		X	

Comments: LRS=500 ppb.

Primary Review by [redacted] Date 5/27/16

Secondary Review by [redacted] Date 5/31/16

R:\icp\misc\data review forms\icpms review form

Data Review Form

Service Request #:	**K1605069**
Instrument ID#:	**K-ICP-MS-05**
DataFile Name:	**R:\ICP\WIP\DATA\K-ICP-MS-05 (Agilent)\052716A.csv**
RUNNO:	**498408**

There are no issues to report.

Primary Approve [redacted] 7/16

Secondary Approve

	Sample						
		Rjct	Data File	Acq. Date-Time	Type	Sample Name	Comment
1			001CALB.	5/27/2016 8:30:05 AM	CalBlk	Rinse	
2			002CALB.	5/27/2016 8:33:38 AM	CalBlk	Prime	
3			003CALB.	5/27/2016 8:37:11 AM	CalBlk	Blank	
4			004CALS.	5/27/2016 8:40:42 AM	CalStd	25ppb	
5			005_ICV.d	5/27/2016 8:44:14 AM	ICV	ICV	
6			006_CCV.	5/27/2016 8:47:47 AM	CCV	CCV	
7			007_ICB.d	5/27/2016 8:51:20 AM	ICB	ICB	
8			008_CCB.	5/27/2016 8:54:53 AM	CCB	CCB	
9			009LICV.d	5/27/2016 8:57:55 AM	LLICV	LLICVS	
10			010SMPL.	5/27/2016 9:00:58 AM	Sample	LRSTD	
11			011ICSA.d	5/27/2016 9:03:54 AM	ICSA	ICSA	
12			012ICSB.d	5/27/2016 9:06:56 AM	ICSB	ICSAB	
13			013SMPL.	5/27/2016 9:09:58 AM	Sample	K1605069-013	5
14			014SMPL.	5/27/2016 9:12:59 AM	Sample	K1605069-014	5
15			015SMPL.	5/27/2016 9:16:00 AM	Sample	K1605069-015	5
16			016SMPL.	5/27/2016 9:19:02 AM	Sample	K1605069-016	5
17			017SMPL.	5/27/2016 9:22:04 AM	Sample	K1605069-017	5
18			018SMPL.	5/27/2016 9:25:05 AM	Sample	K1605069-018	5
19			019SMPL.	5/27/2016 9:28:08 AM	Sample	K1605069-019	5
20			020_PB.d	5/27/2016 9:31:09 AM	PB	KQ1605183-01	5
21			021_LCS.d	5/27/2016 9:34:10 AM	LCS	KQ1605183-02	20
22			022SMPL.	5/27/2016 9:37:12 AM	Sample	K1604894-001	5
23			023_CCV.	5/27/2016 9:40:14 AM	CCV	CCV	
24			024_CCB.	5/27/2016 9:43:17 AM	CCB	CCB	
25			025LCCV.	5/27/2016 9:46:19 AM	LLCCV	LLCCVS	
26			026SMPL.	5/27/2016 9:49:20 AM	Sample	K1604894-001D	5
27			027SMPL.	5/27/2016 9:52:23 AM	Sample	K1604894-001L	5
28			028SMPL.	5/27/2016 9:55:23 AM	PDS	K1604894-001A	5
29			029SMPL.	5/27/2016 9:58:25 AM	Spike	K1604894-001S	5
30			030SMPL.	5/27/2016 10:01:26 AM	Sample	K1604894-002	5
31			031SMPL.	5/27/2016 10:04:28 AM	Sample	K1604894-003	5
32			032SMPL.	5/27/2016 10:07:28 AM	Sample	K1604894-004	5
33			033SMPL.	5/27/2016 10:10:29 AM	Sample	K1604894-005	5
34			034SMPL.	5/27/2016 10:13:31 AM	Sample	K1604894-006	5
35			035SMPL.	5/27/2016 10:16:32 AM	Sample	K1604894-007	5

Sample						
	Rjct	Data File	Acq. Date-Time	Type	Sample Name	Comment
36		036_CCV.	5/27/2016 10:19:33 AM	CCV	CCV	
37		037_CCB.	5/27/2016 10:22:33 AM	CCB	CCB	
38		038SMPL.	5/27/2016 10:25:35 AM	Sample	K1604894-008	5
39		039SMPL.	5/27/2016 10:28:36 AM	Sample	K1604894-009	5
40		040SMPL.	5/27/2016 10:31:38 AM	Sample	K1604894-010	5
41		041SMPL.	5/27/2016 10:34:40 AM	Sample	K1604894-011	5
42		042_CCV.	5/27/2016 10:37:39 AM	CCV	CCV	
43		043_CCB.	5/27/2016 10:40:41 AM	CCB	CCB	
44		044LCCV.	5/27/2016 10:43:42 AM	LLCCV	LLCCVS	

Analyte				
Name		Mass	ISTD	Tune Mode
1	Be	9	6	No Gas
2	As	75	72	He
3	Se	77	72	H2
4	Se	78	72	H2
5	[Pb]	206	175	He
6	[Pb]	207	175	He
7	Pb	208	175	He
8	Li	6		No Gas
9	Ge	72		No Gas
10	Ge	72		He
11	Ge	72		H2
12	Lu	175		He

US EPA Tune Check Sample Report

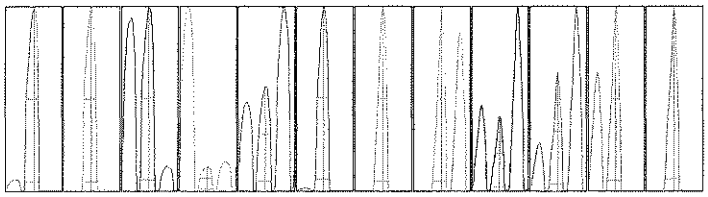
Batch Folder D:\Data\Experiments\052716A.b
Report Comment ALS Tune
Instrument Name G3281A JP13482848

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
7	37115	2.04	5.00	
9	16523	2.02	5.00	
24	93349	2.01	5.00	
25	12593	2.54	5.00	
26	14961	2.51	5.00	
59	164753	2.46	5.00	
115	259340	2.48	5.00	
206	59583	2.49	5.00	
207	52415	2.31	5.00	
208	128914	2.12	5.00	
209	200634	3.00	5.00	
238	260027	2.85	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
7	37407	37629	37533	37211	35792
9	16853	16757	16450	16560	15998
24	93266	94607	94007	94706	90157
25	12626	12722	12785	12799	12034
26	15175	15125	15218	14981	14308
59	167394	165961	166232	166608	157571
115	262196	263798	262004	260714	247990
206	60784	60217	59960	59953	57000
207	53540	52908	52588	52683	50353
208	130860	130135	129855	129634	124084
209	205194	202153	203157	202582	190087
238	266230	264641	261892	259844	247527

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
7	6134	7.05	6.9 - 7.1		0.787	0.900	
9	2780	9.00	8.9 - 9.1		0.785	0.900	
24	15233	23.95	23.9 - 24.1		0.788	0.900	
25	2018	25.00	24.9 - 25.1		0.787	0.900	
26	2430	25.95	25.9 - 26.1		0.809	0.900	
59	29032	58.95	58.9 - 59.1		0.781	0.900	
115	52647	115.00	114.9 - 115.1		0.756	0.900	
206	12861	206.00	205.9 - 206.1		0.745	0.900	
207	11187	207.00	206.9 - 207.1		0.762	0.900	
208	27727	208.00	207.9 - 208.1		0.741	0.900	
209	42860	209.00	208.9 - 209.1		0.750	0.900	
238	54427	238.00	237.9 - 238.1		0.770	0.900	

X% = 5 **Integration Time [sec] =** 0.1 **Acquisition Time [sec] =** 279 **Y Axis =** Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.57	L/min			
RF Matching	1.76	V	Option Gas	0.0	%			
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps			
S/C Temp	2	°C						

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	8.6	V			
Extract 2	-150.0	V	Cell Entrance	-30	V			
Omega Bias	-80	V	Cell Exit	-50	V			
Deflect	11.8	V						

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	false		3rd Gas Flow	0	%			
He Flow	0.0	mL/min	OctP Bias	-8.0	V			
H2 Flow	0.0	mL/min	OctP RF	190	V			
Energy Discrimination	5.0	V						

Calibration Blank Report

Sample Table

Sample Name	Blank
Data File Name	003CALB.d
Data Path Name	D:\Data\Experiments\052716A.b
Acq Date Time	2016-05-27T08:37:11-07:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	Tune Mode	CPS	%RSD
Be	9	No Gas	24	54.29
Se	77	H2	736	0.46
Se	78	H2	8	156.25
[Pb]	206	He	107	26.85
[Pb]	207	He	74	33.12
Pb	208	He	371	4.78

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD
Li	6	No Gas	614002	0.85
Ge	72	H2	1056989	1.64
Lu	175	He	2184247	1.65

Calibration Standard Report

Sample Table

Sample Name	25ppb
Data File Name	004CALS.d
Data Path Name	D:\Data\Experiments\052716A.b
Acq Date Time	2016-05-27T08:40:42-07:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	CPS	%RSD
Be	9	No Gas	57725	0.00
Se	77	H2	4733	0.02
Se	78	H2	12805	0.01
[Pb]	206	He	127459	0.00
[Pb]	207	He	113306	0.00
Pb	208	He	522766	0.00

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	553776	0.67	614002	90.19	30	120	
Ge	72	H2	977959	1.85	1056989	92.52	30	120	
Lu	175	He	1964135	2.26	2184247	89.92	30	120	

Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICV
Data File Name	005_ICV.d
Data Path Name	D:\Data\Experiments\052716A.b
Acq Date Time	2016-05-27T08:44:14-07:00
Sample Type	ICV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	2.551	0.313	6513	0.83	2.5	102	
Se	77	H2	25.439	0.820	5225	0.57	25	102	
Se	78	H2	25.069	1.870	13966	2.00	25	100	
[Pb]	206	He	24.218	0.955	140357	0.76	25	97	
[Pb]	207	He	25.153	1.272	129593	0.32	25	101	
Pb	208	He	24.656	1.268	586077	0.11	25	99	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	610373	1.09	614002	99.41	30	120	
Ge	72	H2	1063559	0.13	1056989	100.62	30	120	
Lu	175	He	2232187	1.29	2184247	102.19	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	006_CCV.d
Data Path Name	D:\Data\Experiments\052716A.b
Acq Date Time	2016-05-27T08:47:47-07:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	24.878	0.621	64190	0.89	25	100	
Se	77	H2	25.431	0.851	5309	0.21	25	102	
Se	78	H2	25.535	1.191	14456	1.24	25	102	
[Pb]	206	He	24.748	1.615	141245	1.40	25	99	
[Pb]	207	He	24.793	2.241	125786	0.28	25	99	
Pb	208	He	24.856	2.522	581747	0.47	25	99	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	618794	0.89	614002	100.78	30	120	
Ge	72	H2	1080830	0.52	1056989	102.26	30	120	
Lu	175	He	2198536	2.29	2184247	100.65	30	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB
Data File Name	007_ICB.d
Data Path Name	D:\Data\Experiments\052716A.b
Acq Date Time	2016-05-27T08:51:20-07:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	0.001	247.6	27	27.7	0.04	
Se	77	H2	0.148	73.9	783	2.6	20	
Se	78	H2	0.001	1641.6	9	86.6	0.5	
[Pb]	206	He	0.000	33413.9	108	7.1	0.1	
[Pb]	207	He	0.005	129.5	99	33.1	0.1	
Pb	208	He	0.001	150.7	410	14.9	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	614207	1.58	614002	100.03	30	120	
Ge	72	H2	1085533	0.70	1056989	102.70	30	120	
Lu	175	He	2209391	2.26	2184247	101.15	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	008_CCB.d
Data Path Name	D:\Data\Experiments\0S2716A.b
Acq Date Time	2016-05-27T08:54:53-07:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	-0.001	-138.4	20	28.9	0.04	
Se	77	H2	0.232	127.2	692	6.5	20	
Se	78	H2	-0.006	-85.0	4	66.1	0.5	
[Pb]	206	He	-0.003	-151.8	76	31.9	0.1	
[Pb]	207	He	0.000	8877.9	64	38.1	0.1	
Pb	208	He	-0.001	-55.9	293	3.4	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	582531	3.66	614002	94.87	30	120	
Ge	72	H2	940761	0.51	1056989	89.00	30	120	
Lu	175	He	1882955	1.93	2184247	86.21	30	120	

Low Level Initial Calibration Verification (LLICV) Report

Sample Table

Sample Name	LLICVS
Data File Name	009LICV.d
Data Path Name	D:\Data\Experiments\052716A.b
Acq Date Time	2016-05-27T08:57:55-07:00
Sample Type	LLICV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %R5D	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	0.040	12.231	125	10.58	0.04	99	
Se	77	H2	2.080	5.862	1108	0.91	2	104	
Se	78	H2	2.004	1.816	1124	2.48	2	100	
[Pb]	206	He	0.098	0.896	659	0.29	0.1	98	
[Pb]	207	He	0.093	11.415	542	9.39	0.1	93	
Pb	208	He	0.099	10.927	2666	8.99	0.1	99	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%R5D	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	609541	0.96	614002	99.27	30	120	
Ge	72	H2	1063740	1.04	1056989	100.64	30	120	
Lu	175	He	2174661	0.71	2184247	99.56	30	120	

Sample Report

Sample Table

Sample Name	LRSTD
Data File Name	010SMPL.d
Data Path Name	D:\Data\Experiments\052716A.b
Acq Date Time	2016-05-27T09:00:58-07:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	496.019	1.22	1265502	0.04	
Se	77	H2	489.025	1.70	88185	0.55	
Se	78	H2	484.051	1.98	273347	0.18	
[Pb]	206	He	505.876	0.57	2817158	0.02	
[Pb]	207	He	501.385	1.57	2482757	0.02	
Pb	208	He	492.576	0.31	11252461	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	612080	0.49	614002	99.69	30	120	
Ge	72	H2	1078914	1.78	1056989	102.07	30	120	
Lu	175	He	2146329	0.24	2184247	98.26	30	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA
Data File Name	011ICSA.d
Data Path Name	D:\Data\Experiments\052716A.b
Acq Date Time	2016-05-27T09:03:54-07:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	QC Flag
Be	9	No Gas	0.130	8.6	326	6.8	
Se	77	H2	1.149	2.9	940	1.2	
Se	78	H2	0.079	18.7	52	16.8	
[Pb]	206	He	0.114	10.1	742	8.3	
[Pb]	207	He	0.103	13.3	581	11.8	
Pb	208	He	0.109	5.9	2848	5.2	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	561520	1.22	614002	91.45	30	120	
Ge	72	H2	1059540	1.24	1056989	100.24	30	120	
Lu	175	He	2148270	0.35	2184247	98.35	30	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB
Data File Name	012ICSB.d
Data Path Name	D:\Data\Experiments\052716A.b
Acq Date Time	2016-05-27T09:06:56-07:00
Sample Type	ICSB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	0.042	6.441	124	5.65	-1	-4.2	
Se	77	H2	25.160	3.116	5148	1.17	25	100.6	
Se	78	H2	23.849	2.102	13216	1.27	25	95.4	
[Pb]	206	He	0.075	3.841	528	0.36	-1	-7.5	
[Pb]	207	He	0.076	18.810	456	12.85	-1	-7.6	
Pb	208	He	0.075	6.814	2095	3.13	-1	-7.5	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	574796	0.53	614002	93.61	30	120	
Ge	72	H2	1058110	1.54	1056989	100.11	30	120	
Lu	175	He	2173547	3.49	2184247	99.51	30	120	

Sample Report

Sample Table

Sample Name	K1605069-013
Data File Name	013SMPL.d
Data Path Name	D:\Data\Experiments\052716A.b
Acq Date Time	2016-05-27T09:09:58-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	3.042	1.81	7762	0.04	
Se	77	H2	2.681	5.74	1215	0.22	
Se	78	H2	0.476	7.04	274	0.17	
[Pb]	206	He	44.726	0.73	263903	0.02	
[Pb]	207	He	43.013	1.56	225647	0.02	
Pb	208	He	43.750	1.11	1058833	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	610202	0.73	614002	99.38	30	120	
Ge	72	H2	1065027	1.55	1056989	100.76	30	120	
Lu	175	He	2273346	1.06	2184247	104.08	30	120	

Sample Report

Sample Table

Sample Name	K1605069-014
Data File Name	014SMPL.d
Data Path Name	D:\Data\Experiments\052716A.b
Acq Date Time	2016-05-27T09:12:59-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	11.199	1.38	29232	0.04	
Se	77	H2	5.213	4.37	1700	0.31	
Se	78	H2	1.127	10.67	650	0.17	
[Pb]	206	He	29.812	3.26	183033	0.02	
[Pb]	207	He	26.579	3.38	145093	0.02	
Pb	208	He	28.236	3.13	711123	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	625783	0.94	614002	101.92	30	120	
Ge	72	H2	1089006	1.62	1056989	103.03	30	120	
Lu	175	He	2366237	2.61	2184247	108.33	30	120	

Sample Report

Sample Table

Sample Name	K1605069-015
Data File Name	015SMPL.d
Data Path Name	D:\Data\Experiments\052716A.b
Acq Date Time	2016-05-27T09:16:00-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	6.791	3.42	17850	0.04	
Se	77	H2	4.929	4.56	1451	0.34	
Se	78	H2	0.941	2.20	480	0.20	
[Pb]	206	He	51.684	2.09	308081	0.02	
[Pb]	207	He	48.088	1.53	254879	0.02	
Pb	208	He	49.792	2.13	1217439	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	630070	2.16	614002	102.62	30	120	
Ge	72	H2	958816	1.68	1056989	90.71	30	120	
Lu	175	He	2296964	1.19	2184247	105.16	30	120	

Sample Report

Sample Table

Sample Name	K1605069-016
Data File Name	016SMPL.d
Data Path Name	D:\Data\Experiments\052716A.b
Acq Date Time	2016-05-27T09:19:02-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	6.290	0.47	16569	0.04	
Se	77	H2	4.578	4.79	1600	0.29	
Se	78	H2	0.935	4.56	547	0.17	
[Pb]	206	He	47.395	2.12	285285	0.02	
[Pb]	207	He	44.351	1.96	237376	0.02	
Pb	208	He	46.048	2.00	1136960	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	631089	1.03	614002	102.78	30	120	
Ge	72	H2	1099656	0.64	1056989	104.04	30	120	
Lu	175	He	2319528	1.36	2184247	106.19	30	120	

Sample Report

Sample Table

Sample Name	K1605069-017
Data File Name	0175MPL.d
Data Path Name	D:\Data\Experiments\052716A.b
Acq Date Time	2016-05-27T09:22:04-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	10.445	1.55	27267	0.04	
Se	77	H2	5.242	4.63	1707	0.31	
Se	78	H2	1.113	2.34	643	0.17	
[Pb]	206	He	62.869	0.24	384047	0.02	
[Pb]	207	He	54.780	2.26	297551	0.02	
Pb	208	He	58.937	0.79	1476826	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	625819	1.46	614002	101.92	30	120	
Ge	72	H2	1090162	0.28	1056989	103.14	30	120	
Lu	175	He	2353766	0.05	2184247	107.76	30	120	

Sample Report

Sample Table

Sample Name	K1605069-018
Data File Name	018SMPL.d
Data Path Name	D:\Data\Experiments\052716A.b
Acq Date Time	2016-05-27T09:25:05-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	16.687	1.42	44229	0.04	
Se	77	H2	6.662	1.64	2004	0.33	
Se	78	H2	1.443	4.70	849	0.17	
[Pb]	206	He	46.515	1.57	291756	0.02	
[Pb]	207	He	36.477	2.70	203416	0.02	
Pb	208	He	41.672	2.02	1072126	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	635658	1.75	614002	103.53	30	120	
Ge	72	H2	1113053	1.20	1056989	105.30	30	120	
Lu	175	He	2417066	2.08	2184247	110.66	30	120	

Sample Report

Sample Table

Sample Name	K1605069-019
Data File Name	019SMPL.d
Data Path Name	D:\Data\Experiments\052716A.b
Acq Date Time	2016-05-27T09:28:08-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	10.796	0.65	27815	0.04	
Se	77	H2	4.144	4.64	1500	0.28	
Se	78	H2	0.880	4.16	508	0.17	
[Pb]	206	He	62.754	2.90	381184	0.02	
[Pb]	207	He	58.531	3.38	316100	0.02	
Pb	208	He	60.905	2.74	1517561	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	617578	0.24	614002	100.58	30	120	
Ge	72	H2	1084135	1.72	1056989	102.57	30	120	
Lu	175	He	2341860	3.28	2184247	107.22	30	120	

Prep Blank (PB) Report

Sample Table

Sample Name	KQ1605183-01
Data File Name	020_PB.d
Data Path Name	D:\Data\Experiments\052716A.b
Acq Date Time	2016-05-27T09:31:09-07:00
Sample Type	PB
Dilution	1
Comment	5
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	0.008	11.4	46	4.3	0.04	
Se	77	H2	0.061	674.7	783	9.9	2	
Se	78	H2	-0.004	-25.8	6	9.1	0.5	
[Pb]	206	He	0.006	59.1	148	14.5	0.1	
[Pb]	207	He	0.012	34.9	143	16.3	0.1	
Pb	208	He	0.011	17.5	672	5.9	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	629321	1.18	614002	102.49	30	120	
Ge	72	H2	1107033	0.74	1056989	104.73	30	120	
Lu	175	He	2314693	1.44	2184247	105.97	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	KQ1605183-02
Data File Name	021_LCS.d
Data Path Name	D:\Data\Experiments\052716A.b
Acq Date Time	2016-05-27T09:34:10-07:00
Sample Type	LCS
Dilution	1
Comment	20
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	5.134	2.663	13858	1.66	5	102.7	
Se	77	H2	54.147	2.865	10516	2.04	50	108.3	
Se	78	H2	53.770	1.308	30617	1.00	50	107.5	
[Pb]	206	He	48.290	3.009	290022	0.86	50	96.6	
[Pb]	207	He	50.568	1.288	270102	1.04	50	101.1	
Pb	208	He	49.206	1.865	1212398	0.41	50	98.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	646586	1.60	614002	105.31	30	120	
Ge	72	H2	1087527	1.44	1056989	102.89	30	120	
Lu	175	He	2314990	2.28	2184247	105.99	30	120	

Sample Report

Sample Table

Sample Name	K1604894-001
Data File Name	022SMPL.d
Data Path Name	D:\Data\Experiments\052716A.b
Acq Date Time	2016-05-27T09:37:12-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	0.836	3.21	2200	0.04	
Se	77	H2	6.556	1.98	1940	0.34	
Se	78	H2	6.218	3.03	3549	0.18	
[Pb]	206	He	29.303	1.82	175866	0.02	
[Pb]	207	He	28.543	1.35	152324	0.02	
Pb	208	He	28.813	1.79	709307	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	624145	0.80	614002	101.65	30	120	
Ge	72	H2	1087891	1.24	1056989	102.92	30	120	
Lu	175	He	2312339	2.62	2184247	105.86	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	023_CCV.d
Data Path Name	D:\Data\Experiments\052716A.b
Acq Date Time	2016-05-27T09:40:14-07:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	25.298	1.664	63889	0.35	25	101	
Se	77	H2	25.023	2.157	5401	1.09	25	100	
Se	78	H2	24.810	1.832	14488	0.91	25	99	
[Pb]	206	He	24.234	2.942	142225	0.55	25	97	
[Pb]	207	He	24.485	2.492	127766	0.20	25	98	
Pb	208	He	24.345	2.608	586070	0.39	25	97	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	605785	1.54	614002	98.66	30	120	
Ge	72	H2	1115013	0.97	1056989	105.49	30	120	
Lu	175	He	2261381	2.43	2184247	103.53	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	024_CCB.d
Data Path Name	D:\Data\Experiments\052716A.b
Acq Date Time	2016-05-27T09:43:17-07:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	0.005	24.6	37	8.1	0.04	
Se	77	H2	0.167	162.7	807	6.1	20	
Se	78	H2	0.004	154.0	11	36.4	0.5	
[Pb]	206	He	-0.001	-485.7	106	19.0	0.1	
[Pb]	207	He	0.002	367.9	87	42.3	0.1	
Pb	208	He	0.001	173.5	414	11.6	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	620715	0.53	614002	101.09	30	120	
Ge	72	H2	1114014	1.09	1056989	105.40	30	120	
Lu	175	He	2257638	1.92	2184247	103.36	30	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLCCVS
Data File Name	025LCCV.d
Data Path Name	D:\Data\Experiments\052716A.b
Acq Date Time	2016-05-27T09:46:19-07:00
Sample Type	LLCCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	0.044	9.061	137	6.57	0.04	110	
Se	77	H2	2.006	18.917	1154	5.21	2	100	
Se	78	H2	1.878	1.318	1111	2.25	2	94	
[Pb]	206	He	0.097	4.803	683	3.38	0.1	97	
[Pb]	207	He	0.100	3.711	602	4.15	0.1	100	
Pb	208	He	0.100	2.126	2802	2.51	0.1	100	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	615440	1.67	614002	100.23	30	120	
Ge	72	H2	1121613	1.15	1056989	106.11	30	120	
Lu	175	He	2274166	1.31	2184247	104.12	30	120	

LABORATORY DATA CONSULTANTS, INC.
2701 Loker Ave. West, Suite 220, Carlsbad, CA 92010 Bus: 760-827-1100 Fax: 760-827-1099

ARCADIS U.S., Inc.
401 E. Main Street, Suite 400
El Paso, TX 79901
[redacted]

July 20, 2016

SUBJECT: Fort Bliss, Castner Range, Data Validation

[redacted]

Enclosed are the final validation reports for the fraction listed below. These SDGs were received on July 1, 2016. Attachment 1 is a summary of the samples that were reviewed for each analysis.

LDC Project #36618:

SDG #	Fraction:
K1604717 & K1605069	Metals

The data validation was performed under Level III & IV guidelines. The analyses were validated using the following documents, as applicable to each method:

- Final Quality Assurance Project Plan, Military Munitions Response Program Remedial Investigation, Closed Castner Firing Range, Fort Bliss, El Paso, Texas, February 2015
- U.S. Department of Defense Quality Systems Manual for Environmental Laboratories, 5.0, July 2013
- USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review, October 2004
- EPA SW 846, Third Edition, Test Methods for Evaluating Solid Waste, update 1, July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III, December 1996; update IIIA, April 1998; IIIB, November 2004; update IV, February 2007; update V, July 2014

Please feel free to contact us if you have any questions.

Sincerely,

[redacted]

EDD 90/10 ADR/IV

LDC #36618 (Arcadis-Millersville, MD / Fort Bliss, Castner Range)

LDC	SDG#	DATE REC'D	(2) DATE DUE	(7) Metals (6020A)																															
Matrix:	Water/Sediment			W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S
A	K1604717	07/01/16	07/18/16	0	26																														
B	K1605069	07/01/16	07/18/16	0	12																														
B	K1605069	07/01/16	07/18/16	0	7																														
Total	T/PG			0	45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45

Shaded cells indicate Level IV validation (all other cells are Level III validation). These sample counts do not include MS/MSD, and DUPs

L:\Arcadis\Fort Bliss\36618ST.wpd

Data Validation Report
Fort Bliss, Castner Range

SDGs: K1604717, K1605069

Prepared for

Arcadis U.S., Inc.
401 E. Main Street, Suite 400
El Paso, TX 79901

Prepared by

Laboratory Data Consultants, Inc.
2701 Loker Ave West, Suite 220
Carlsbad, CA 92010

July 20, 2016

INTRODUCTION

This Data Validation Report (DVR) presents Level III and Level IV data validation results for samples collected during the May 2016 sampling period. Data validation was performed in accordance with the Final Quality Assurance Project Plan (QAPP), Military Munitions Response Program Remedial Investigation, Closed Castner Firing Range, Fort Bliss, El Paso, Texas (February 2015), the U.S. Department of Defense (DoD) Quality Systems Manual (QSM) for Environmental Laboratories, Version 5.0 (July 2013), and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines (CLPNFG) for Inorganic Superfund Data Review (October 2004). Where specific guidance is not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Metals by Environmental Protection Agency (EPA) SW 846 Method 6020A

The sample identification and methods of analyses performed on each sample is presented in Attachment 1. Overall data qualification summary is presented in Attachment 2. Level III Automated Data Review outliers are presented in Enclosure I. DVRs for samples on which Level 4 validation was performed are presented in Enclosure II.

All sample results were subjected to Level III data validation, which comprises an evaluation of quality control (QC) summary results for sample holding times, initial and continuing calibrations, laboratory blanks, initial and continuing calibration blanks (ICB/CCBs), surrogates, interference check (ICSA and ICSAB) samples, matrix spike/matrix spike duplicates (MS/MSD), serial dilution, laboratory control sample (LCS), field duplicates, and split samples. Approximately 15 percent of samples were subjected to Level 4 evaluation as indicated in Attachment 1, which comprised a review of the QC summary forms as well as the raw data, to confirm sample quantitation and identification.

Automated data review was performed on all QC summary results using the Automated Data Review (ADR) software program (LDC, 2013) with exception of the calibrations, interference check samples, ICB/CCBs and serial dilution, which were validated manually. Quality assurance (QA)/QC criteria specified in the QAPP, DoD QSM and CLPNFGs were incorporated with the program's reference library to assess compliance with project requirements.

The following are definitions of the data qualifiers:

J (Estimated): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated due to non-conformances discovered during data validation.

U (Non-detected): The compound or analyte was analyzed for and positively identified by the laboratory; however the analyte should be considered non-detect at the reported concentration due to the presence of contaminants detected in the associated blank(s).

UJ (Non-detected estimated): The compound or analyte was reported as not detected by the laboratory; however the reported quantitation/detection limit is estimated due to non-conformances discovered during data validation.

R (Rejected): The sample results were rejected due to gross non-conformances discovered during data validation. Data qualified as rejected is not usable.

NA (Not applicable): Data did not warrant qualification since detected results only are affected and the compound was not detected in the associated samples.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

I. Sample Receipt & Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

II. Initial Calibration and Initial Calibration Verification

All criteria for the initial calibration and initial calibration verifications of the method were met.

III. Continuing Calibration

All criteria for the continuing calibration verifications of the method were met.

IV. Laboratory Blanks

Laboratory blanks were performed as required by the method. No contaminant concentrations were detected in the laboratory blanks reviewed by ADR.

No contaminant concentrations were detected in the initial or continuing calibration blanks with the following exceptions:

SDG/ Method	Laboratory Blank ID	Analyte	Maximum Concentration	Associated Samples
K1604717/ 6020A	ICB/CCB	Antimony	0.020 ug/L	FTBL-SED-51-0-6-050316 FTBL-SED-51-12-18-050316 FTBL-SED-36-0-6-050316 FTBL-SED-37-0-6-050316 FTBL-SED-38-0-6-050316 FTBL-SED-39-0-6-050316 FTBL-SED-39-12-18-050316 FTBL-SED-40-0-6-050316 FTBL-SED-40-12-18-050316 FTBL-SED-46-0-6-050416 FTBL-SED-47-0-6-050416 FTBL-SED-48-0-6-050416 FTBL-SED-49-0-6-050416 FTBL-SED-50-0-6-050416 FTBL-SED-45-0-6-050416 FTBL-SED-44-0-6-050416 FTBL-SED-43-0-6-050416 FTBL-SED-42-0-6-050416 FTBL-SED-41-0-6-050416 FD050416 FTBL-SED-31-0-6-050516
K1604717/ 6020A	ICB/CCB	Antimony Beryllium	0.023 ug/L 0.012 ug/L	FTBL-SED-32-0-6-050516 FTBL-SED-33-0-6-050516 FTBL-SED-34-0-6-050516 FD050516 FTBL-SED-35-0-6-050516

SDG/ Method	Laboratory Blank ID	Analyte	Maximum Concentration	Associated Samples
K1605069/ 6020A	ICB/CCB	Antimony	0.020 ug/L	FTBL-SED-52-0-6-051116 FTBL-SED-01-0-6-051216 FTBL-SED-02-0-6-051216 FD051216 FTBL-SED-03-0-6-051216 FTBL-SED-04-0-6-051216 FTBL-SED-05-0-6-051216
K1605069/ 6020A	ICB/CCB	Antimony	0.021 ug/L	FTBL-SED-25-0-6-051016 FTBL-SED-11-0-6-051016 FTBL-SED-12-0-6-051016 FD051016 FTBL-SED-13-0-6-051016 FTBL-SED-20-0-6-051116 FTBL-SED-20-12-18-051116 FTBL-SED-19-0-6-051116 FTBL-SED-19-12-18-051116 FTBL-SED-18-0-6-051116 FTBL-SED-17-0-6-051116 FTBL-SED-16-0-6-051116

Sample concentrations were compared to concentrations detected in the initial or continuing calibration blanks. The sample concentrations were not detected or were significantly greater than the concentrations found in the associated blanks.

V. Field Blanks

No field blanks were identified in these SDGs.

VI. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were performed on an associated project sample. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the exception of antimony and copper in three MS/MSD pairs. No data were qualified since the post-digestion spike %R was within QC limits. The details are provided in Enclosure I.

VIII. Duplicate Sample Analysis

The laboratory has indicated that there were no duplicate (DUP) analyses specified for the samples in this SDG, and therefore laboratory duplicate analyses were not performed for this SDG.

IX. Serial Dilution

Serial dilution analysis was performed on an associated project sample. The percent differences (%D) were within QC limits.

X. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

XI. Field Duplicates/Split Samples

Four field duplicate pairs were collected and analyzed for metals. All RPDs were within QC limits. The field duplicate result comparisons are provided in Enclosure I.

Samples FTBL-SED-49-0-6-050416 and FTBL-SED-49-0-6-050416-QA (from SDG FA33720), FTBL-SED-34-0-6-050516 and FTBL-SED-34-0-6-050516-QA (from SDG FA33720), FTBL-SED-12-0-6-051016 and FTBL-SED-12-0-6-051016-QA (from SDG FA33973), and FTBL-SED-02-0-6-051216 and FTBL-SED-02-0-6-051216-QA (from SDG FA33973) were identified as split samples. No metals were detected in any of the split samples with the following exceptions:

Analyte	Concentration (mg/Kg)		RPD (≤50)	Qualifiers
	FTBL-SED-49-0-6-050416	FTBL-SED-49-0-6-050416-QA (SDG: FA33720)		
Antimony	0.470	0.77U	48	
Arsenic	9.42	6.0	44	
Beryllium	0.930	0.77	19	
Copper	16.4	13.5	19	
Lead	41.4	50.7	20	
Nickel	9.39	8.6	9	
Zinc	41.7	36.7	13	

Analyte	Concentration (mg/Kg)		RPD (≤50)	Qualifiers
	FTBL-SED-34-0-6-050516	FTBL-SED-34-0-6-050516-QA (SDG: FA33720)		
Antimony	0.135	1.1U	156	J (all detects) UJ (all non-detects)
Arsenic	5.57	5.2	7	
Beryllium	1.43	1.0	35	
Copper	7.92	9.5	18	
Lead	11.9	15.5	26	

Analyte	Concentration (mg/Kg)		RPD (≤50)	Qualifiers
	FTBL-SED-34-0-6-050516	FTBL-SED-34-0-6-050516-QA (SDG: FA33720)		
Nickel	6.66	8.7	27	
Zinc	57.6	52.9	9	

Analyte	Concentration (mg/Kg)		RPD (≤50)	Qualifiers
	FTBL-SED-12-0-6-051016	FTBL-SED-12-0-6-051016-QA (SDG: FA33973)		
Antimony	0.263	2.1U	155	J (all detects) UJ (all non-detects)
Arsenic	9.13	17.2	61	J (all detects)
Beryllium	2.08	1.5	32	
Copper	32.2	29.3	9	
Lead	36.0	34.8	3	
Nickel	15.3	13.9	10	
Zinc	318	309	3	

Analyte	Concentration (mg/Kg)		RPD (≤50)	Qualifiers
	FTBL-SED-02-0-6-051216	FTBL-SED-02-0-6-051216-QA (SDG: FA33973)		
Antimony	0.228	9.5U	191	J (all detects) UJ (all non-detects)
Arsenic	6.21	8.0	25	
Beryllium	3.12	3.2	3	
Copper	13.9	13.1	6	
Lead	20.3	20.8	2	
Nickel	6.74	7.1	5	
Zinc	45.1	60.3	29	

XII. Compound Quantitation

The laboratory reporting limits were evaluated. All laboratory reporting limits met the specified requirements.

XIII. Overall Assessment of Data

The analysis was conducted within all specifications of the methods. No results were rejected in these SDGs.

Due to split sample RPD, data were qualified as estimated in three samples.

The quality control criteria reviewed, as discussed above, were met and are considered acceptable. Sample results that were found to be estimated (J) are usable for limited purposes only. Based upon the data validation, all other results are considered valid and usable for all purposes.

Data flags are summarized and are presented as Attachment 2.

Attachment 1

Sample Cross Reference

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
03-May-2016	FTBL-SED-51-0-6-050316	K1604717-001	N	EPA 3050B	6020A	III
03-May-2016	FTBL-SED-51-0-6-050316MS	K1604717-001MS	MS	EPA 3050B	6020A	III
03-May-2016	FTBL-SED-51-0-6-050316MSD	K1604717-001SD	MSD	EPA 3050B	6020A	III
03-May-2016	FTBL-SED-51-12-18-050316	K1604717-002	N	EPA 3050B	6020A	III
03-May-2016	FTBL-SED-36-0-6-050316	K1604717-003	N	EPA 3050B	6020A	III
03-May-2016	FTBL-SED-37-0-6-050316	K1604717-004	N	EPA 3050B	6020A	III
03-May-2016	FTBL-SED-38-0-6-050316	K1604717-005	N	EPA 3050B	6020A	III
03-May-2016	FTBL-SED-39-0-6-050316	K1604717-006	N	EPA 3050B	6020A	III
03-May-2016	FTBL-SED-39-12-18-050316	K1604717-007	N	EPA 3050B	6020A	III
03-May-2016	FTBL-SED-40-0-6-050316	K1604717-008	N	EPA 3050B	6020A	III
03-May-2016	FTBL-SED-40-12-18-050316	K1604717-009	N	EPA 3050B	6020A	III
04-May-2016	FD050416	K1604717-020	FD	EPA 3050B	6020A	III
04-May-2016	FTBL-SED-46-0-6-050416	K1604717-010	N	EPA 3050B	6020A	III
04-May-2016	FTBL-SED-47-0-6-050416	K1604717-011	N	EPA 3050B	6020A	III
04-May-2016	FTBL-SED-48-0-6-050416	K1604717-012	N	EPA 3050B	6020A	III
04-May-2016	FTBL-SED-49-0-6-050416	K1604717-013	N	EPA 3050B	6020A	III
04-May-2016	FTBL-SED-50-0-6-050416	K1604717-014	N	EPA 3050B	6020A	III
04-May-2016	FTBL-SED-45-0-6-050416	K1604717-015	N	EPA 3050B	6020A	III
04-May-2016	FTBL-SED-44-0-6-050416	K1604717-016	N	EPA 3050B	6020A	III
04-May-2016	FTBL-SED-43-0-6-050416	K1604717-017	N	EPA 3050B	6020A	III
04-May-2016	FTBL-SED-42-0-6-050416	K1604717-018	N	EPA 3050B	6020A	III
04-May-2016	FTBL-SED-41-0-6-050416	K1604717-019	N	EPA 3050B	6020A	III
05-May-2016	FD050516	K1604717-025	FD	EPA 3050B	6020A	III
05-May-2016	FTBL-SED-31-0-6-050516	K1604717-021	N	EPA 3050B	6020A	III
05-May-2016	FTBL-SED-31-0-6-050516MS	K1604717-021MS	MS	EPA 3050B	6020A	III
05-May-2016	FTBL-SED-31-0-6-050516MSD	K1604717-021SD	MSD	EPA 3050B	6020A	III

III = Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike* *DUP = Lab Duplicate*
IV = Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
05-May-2016	FTBL-SED-32-0-6-050516	K1604717-022	N	EPA 3050B	6020A	III
05-May-2016	FTBL-SED-33-0-6-050516	K1604717-023	N	EPA 3050B	6020A	III
05-May-2016	FTBL-SED-34-0-6-050516	K1604717-024	N	EPA 3050B	6020A	III
05-May-2016	FTBL-SED-35-0-6-050516	K1604717-026	N	EPA 3050B	6020A	III
10-May-2016	FD051016	K1605069-004	FD	EPA 3050B	6020A	III
10-May-2016	FTBL-SED-25-0-6-051016	K1605069-001	N	EPA 3050B	6020A	III
10-May-2016	FTBL-SED-25-0-6-051016MS	K1605069-001MS	MS	EPA 3050B	6020A	III
10-May-2016	FTBL-SED-25-0-6-051016MSD	K1605069-001SD	MSD	EPA 3050B	6020A	III
10-May-2016	FTBL-SED-11-0-6-051016	K1605069-002	N	EPA 3050B	6020A	III
10-May-2016	FTBL-SED-12-0-6-051016	K1605069-003	N	EPA 3050B	6020A	III
10-May-2016	FTBL-SED-13-0-6-051016	K1605069-005	N	EPA 3050B	6020A	IV
11-May-2016	FTBL-SED-20-0-6-051116	K1605069-006	N	EPA 3050B	6020A	IV
11-May-2016	FTBL-SED-20-12-18-051116	K1605069-007	N	EPA 3050B	6020A	IV
11-May-2016	FTBL-SED-19-0-6-051116	K1605069-008	N	EPA 3050B	6020A	IV
11-May-2016	FTBL-SED-19-12-18-051116	K1605069-009	N	EPA 3050B	6020A	IV
11-May-2016	FTBL-SED-18-0-6-051116	K1605069-010	N	EPA 3050B	6020A	IV
11-May-2016	FTBL-SED-16-0-6-051116	K1605069-012	N	EPA 3050B	6020A	III
11-May-2016	FTBL-SED-17-0-6-051116	K1605069-011	N	EPA 3050B	6020A	IV
11-May-2016	FTBL-SED-52-0-6-051116	K1605069-013	N	EPA 3050B	6020A	III
11-May-2016	FTBL-SED-52-0-6-051116RE	K1605069-013RE	N	EPA 3050B	6020A	III
12-May-2016	FD051216	K1605069-016	FD	EPA 3050B	6020A	III
12-May-2016	FD051216RE	K1605069-016RE	FD	EPA 3050B	6020A	III
12-May-2016	FTBL-SED-01-0-6-051216	K1605069-014	N	EPA 3050B	6020A	III
12-May-2016	FTBL-SED-01-0-6-051216RE	K1605069-014RE	N	EPA 3050B	6020A	III
12-May-2016	FTBL-SED-02-0-6-051216	K1605069-015	N	EPA 3050B	6020A	III
12-May-2016	FTBL-SED-02-0-6-051216RE	K1605069-015RE	N	EPA 3050B	6020A	III

III = Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike* *DUP = Lab Duplicate*
IV = Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
12-May-2016	FTBL-SED-03-0-6-051216	K1605069-017	N	EPA 3050B	6020A	III
12-May-2016	FTBL-SED-03-0-6-051216RE	K1605069-017RE	N	EPA 3050B	6020A	III
12-May-2016	FTBL-SED-04-0-6-051216	K1605069-018	N	EPA 3050B	6020A	III
12-May-2016	FTBL-SED-04-0-6-051216RE	K1605069-018RE	N	EPA 3050B	6020A	III
12-May-2016	FTBL-SED-05-0-6-051216	K1605069-019	N	EPA 3050B	6020A	III
12-May-2016	FTBL-SED-05-0-6-051216RE	K1605069-019RE	N	EPA 3050B	6020A	III

III = Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike* *DUP = Lab Duplicate*
IV = Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment 2
Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: K1604717, K1605069 **Laboratory: ALS_K**

EDD Filename: K1604717_SEDD2A, K1605069_SEDD2A **eQAPP Name: Arcadis_FtBliss_ALS_160627**

SDG: K1604717

Method Category: **METALS**

Method: **6020A** ***Matrix:*** **Soil**

Sample ID: **FTBL-SED-34-0-6-050516** ***Collected:*** **5/5/2016 11:00:00 AM** ***Analysis Type:*** **Initial** ***Dilution:*** **5.0**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
ANTIMONY	0.135	J	0.028	LOD	0.056	LOQ	mg/Kg	J	Fd

SDG: K1605069

Method Category: **METALS**

Method: **6020A** ***Matrix:*** **Soil**

Sample ID: **FTBL-SED-02-0-6-051216** ***Collected:*** **5/12/2016 10:05:00 AM** ***Analysis Type:*** **Initial** ***Dilution:*** **5.0**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
ANTIMONY	0.228	J	0.020	LOD	0.041	LOQ	mg/Kg	J	Fd

Sample ID: **FTBL-SED-12-0-6-051016** ***Collected:*** **5/10/2016 3:10:00 PM** ***Analysis Type:*** **Initial** ***Dilution:*** **5.0**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
ANTIMONY	0.263	J	0.020	LOD	0.040	LOQ	mg/Kg	J	Fd
ARSENIC	9.13	=	0.08	LOD	0.40	LOQ	mg/Kg	J	Fd

* denotes a non-reportable result

Project Name and Number: 06261038.0000 - Castner Range Fort Bliss, TX

Data Qualifier Summary

Lab Reporting Batch ID: K1604717, K1605069 **Laboratory: ALS_K**

EDD Filename: K1604717_SEDD2A, K1605069_SEDD2A **eQAPP Name: Arcadis_FtBliss_ALS_160627**

Reason Code Legend

Reason Code	*Description*
Fd	Field Duplicate Precision
Ms	Matrix Spike Lower Estimation

* denotes a non-reportable result

Project Name and Number: 06261038.0000 - Castner Range Fort Bliss, TX

Enclosure I

Level III ADR Outliers

(Including Manual Review Outliers)

Quality Control
Outlier Reports

K1604717

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: K1604717 **Laboratory: ALS_K**

EDD Filename: K1604717_SEDD2A **eQAPP Name: Arcadis_FtBliss_ALS_160627**

Method: **6020A**
Matrix: **Soil**

QC Sample ID (Associated Samples)	*Compound*	*MS %R*	*MSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
FTBL-SED-51-0-6-050316MS (Dry) FTBL-SED-51-0-6-050316MSD (Dry) (FTBL-SED-51-0-6-050316)	ANTIMONY COPPER	43 82	46 -	72.00-124.00 84.00-119.00	- -	ANTIMONY COPPER	No Qual, PS in: Sb = 98%, Cu=99%
FTBL-SED-31-0-6-050516MS (Dry) FTBL-SED-31-0-6-050516MSD (Dry) (FTBL-SED-31-0-6-050516)	ANTIMONY	44	48	72.00-124.00	-	ANTIMONY	No Qual, PS in: Sb = 101%

Field Duplicate RPD Report

Lab Reporting Batch ID: K1604717 **Laboratory: ALS_K**

EDD Filename: K1604717_SEDD2A **eQAPP Name: Arcadis_FtBliss_ALS_160627**

Method: 6020A
Matrix: Soil

Analyte	*Concentration (mg/Kg)*		*Sample RPD*	*eQAPP RPD*	*Flag*
	FTBL-SED-34-0-6-050516	FD050516 (Dry)			
ANTIMONY	0.135	0.156	14	50.00	
ARSENIC	5.57	5.07	9	50.00	
BERYLLIUM	1.43	1.23	15	50.00	
COPPER	7.92	11.2	34	50.00	No Qualifiers Applied
LEAD	11.9	14.1	17	50.00	
NICKEL	6.66	10.4	44	50.00	
ZINC	57.6	56.0	3	50.00	

Analyte	*Concentration (mg/Kg)*		*Sample RPD*	*eQAPP RPD*	*Flag*
	FTBL-SED-49-0-6-050416	FD050416 (Dry)			
ANTIMONY	0.470	0.463	2	50.00	
ARSENIC	9.42	9.00	5	50.00	
BERYLLIUM	0.930	0.919	1	50.00	
COPPER	16.4	21.1	25	50.00	No Qualifiers Applied
LEAD	41.4	43.6	5	50.00	
NICKEL	9.39	10.5	11	50.00	
ZINC	41.7	41.8	0	50.00	

Project Name and Number: 06261038.0000 - Castner Range Fort Bliss, TX

LDC #: 36618A4a
SDG #: K1604717
Laboratory: ALS Environmental

VALIDATION COMPLETENESS WORKSHEET
ADR

Date: 7/13/16

[redacted]

METHOD: Metals (EPA SW 846 Method 6020A)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A/N	
II.	ICP/MS Tune	A	
III.	Instrument Calibration	A	
IV.	ICP Interference Check Sample (ICS) Analysis	A	
V.	Laboratory Blanks	SW	ICB/CCB only
VI.	Field Blanks	N	
VII.	Matrix Spike/Matrix Spike Duplicates	N	
VIII.	Duplicate sample analysis	N	
IX.	Serial Dilution	A	
X.	Laboratory control samples	N	(from FA33720)
XI.	Field Duplicates	SW	split=(13, FTBL-SED-49-0-6-050416-QA) =(24, FTBL-SED-310-6-050516-QA)
XII.	Internal Standard (ICP-MS)	A	
XIII.	Sample Result Verification	N	
XIV	Overall Assessment of Data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID	Lab ID	Matrix	Date
1	FTBL-SED-51-0-6-050316	K1604717-001	Sediment	05/03/16
2	FTBL-SED-51-12-18-050316	K1604717-002	Sediment	05/03/16
3	FTBL-SED-36-0-6-050316	K1604717-003	Sediment	05/03/16
4	FTBL-SED-37-0-6-050316	K1604717-004	Sediment	05/03/16
5	FTBL-SED-38-0-6-050316	K1604717-005	Sediment	05/03/16
6	FTBL-SED-39-0-6-050316	K1604717-006	Sediment	05/03/16
7	FTBL-SED-39-12-18-050316	K1604717-007	Sediment	05/03/16
8	FTBL-SED-40-0-6-050316	K1604717-008	Sediment	05/03/16
9	FTBL-SED-40-12-18-050316	K1604717-009	Sediment	05/03/16
10	FTBL-SED-46-0-6-050416	K1604717-010	Sediment	05/04/16
11	FTBL-SED-47-0-6-050416	K1604717-011	Sediment	05/04/16
12	FTBL-SED-48-0-6-050416	K1604717-012	Sediment	05/04/16
13	FTBL-SED-49-0-6-050416	K1604717-013	Sediment	05/04/16
14	FTBL-SED-50-0-6-050416	K1604717-014	Sediment	05/04/16
15	FTBL-SED-45-0-6-050416	K1604717-015	Sediment	05/04/16

LDC #: 36618A4a
SDG #: K1604717
Laboratory: ALS Environmental

VALIDATION COMPLETENESS WORKSHEET
ADR

Date: 7/13/16

[redacted]

METHOD: Metals (EPA SW 846 Method 6020A)

	Client ID	Lab ID	Matrix	Date
16	FTBL-SED-44-0-6-050416	K1604717-016	Sediment	05/04/16
17	FTBL-SED-43-0-6-050416	K1604717-017	Sediment	05/04/16
18	FTBL-SED-42-0-6-050416	K1604717-018	Sediment	05/04/16
19	FTBL-SED-41-0-6-050416	K1604717-019	Sediment	05/04/16
20	FD050416	K1604717-020	Sediment	05/04/16
21	FTBL-SED-31-0-6-050516	K1604717-021	Sediment	05/05/16
22	FTBL-SED-32-0-6-050516	K1604717-022	Sediment	05/05/16
23	FTBL-SED-33-0-6-050516	K1604717-023	Sediment	05/05/16
24	FTBL-SED-34-0-6-050516	K1604717-024	Sediment	05/05/16
25	FD050516	K1604717-025	Sediment	05/05/16
26	FTBL-SED-35-0-6-050516	K1604717-026	Sediment	05/05/16
27	FTBL-SED-51-0-6-050316MS	K1604717-001MS	Sediment	05/03/16
28	FTBL-SED-51-0-6-050316MSD	K1604717-001MSD	Sediment	05/03/16
29	FTBL-SED-31-0-6-050516MS	K1604717-021MS	Sediment	05/05/16
30	FTBL-SED-31-0-6-050516MSD	K1604717-021MSD	Sediment	05/05/16
31				
32				
33				
34				
35				

Notes:

LDC #: 36618A4a

VALIDATION FINDINGS WORKSHEET
Sample Specific Element Reference

[redacted]

All circled elements are applicable to each sample.

Sample ID	Matrix	Target Analyte List (TAL)
1-26		Al, (Sb), As, Ba, (Be), Cd, Ca, Cr, Co, (Cu), Fe, (Pb), Mg, Mn, Hg, (Ni), K, Se, Ag, Na, Tl, V, (Zn), Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
Analysis Method		
ICP		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
ICP-MS		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
GFAA		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___

Comments: Mercury by CVAA if performed

LDC #: 36618A4a

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

[redacted]

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000) Soil preparation factor applied: 100x x 5xdil
Sample Concentration units, unless otherwise noted: ug/L Associated Samples: 1-21

				Sample Identification										
Analyte	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Level	No qualifiers (>5x)										
Sb		0.020	0.05											

Sample Concentration units, unless otherwise noted: ug/L Associated Samples: 22-26

				Sample Identification										
Analyte	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Level	No qualifiers (>5x)										
Sb		0.023	0.0575											
Be		0.012	0.03											

Samples with analyte concentrations within five times the associated ICB, CCB or PB concentration are listed above with the identifications from the Validation Completeness Worksheet. These sample results were qualified as not detected, "U".
Note : a - The listed analyte concentration is the highest ICB, CCB, or PB detected in the analysis of each element.

LDC#: 36618A4a

VALIDATION FINDINGS WORKSHEET
Split Duplicates

METHOD: Metals (EPA Method 6010B/7000)

Analyte	Concentration (mg/Kg)		RPD (≤50)	Qualifiers (Parents Only)
	13	FTBL-SED-49-0-6-050416-QA		
Antimony	0.470	0.77U	48	
Arsenic	9.42	6.0	44	
Beryllium	0.930	0.77	19	
Copper	16.4	13.5	19	
Lead	41.4	50.7	20	
Nickel	9.39	8.6	9	
Zinc	41.7	36.7	13	

Analyte	Concentration (mg/Kg)		RPD (≤50)	Qualifiers (Parents Only)
	24	FTBL-SED-34-0-6-050516-QA		
Antimony	0.135	1.1U	156	~~NQ (<LOQ)~~ J/UJ/A
Arsenic	5.57	5.2	7	
Beryllium	1.43	1.0	35	
Copper	7.92	9.5	18	
Lead	11.9	15.5	26	
Nickel	6.66	8.7	27	
Zinc	57.6	52.9	9	

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Quality Control
Outlier Reports

K1605069

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: K1605069 **Laboratory: ALS_K**

EDD Filename: K1605069_SEDD2A **eQAPP Name: Arcadis_FtBliss_ALS_160627**

Method: **6020A**
Matrix: **Soil**

QC Sample ID (Associated Samples)	*Compound*	*MS %R*	*MSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
FTBL-SED-25-0-6-051016MS (Dry) FTBL-SED-25-0-6-051016MSD (Dry) (FTBL-SED-25-0-6-051016)	ANTIMONY	69	63	72.00-124.00	-	ANTIMONY	No Qual, PS in: Sb = 97%

Project Name and Number: 06261038.0000 - Castner Range Fort Bliss, TX

Field Duplicate RPD Report

Lab Reporting Batch ID: K1605069 **Laboratory: ALS_K**

EDD Filename: K1605069_SEDD2A **eQAPP Name: Arcadis_FtBliss_ALS_160627**

Method: 6020A
Matrix: Soil

Analyte	*Concentration (mg/Kg)*		*Sample RPD*	*eQAPP RPD*	*Flag*
	FTBL-SED-12-0-6-051016	**FD051016 (Dry)**			
ANTIMONY	0.263	0.214	21	50.00	No Qualifiers Applied
ARSENIC	9.13	8.43	8	50.00	
BERYLLIUM	2.08	1.98	5	50.00	
COPPER	32.2	28.9	11	50.00	
LEAD	36.0	29.5	20	50.00	
NICKEL	15.3	16.8	9	50.00	
ZINC	318	352	10	50.00	

Analyte	*Concentration (mg/Kg)*		*Sample RPD*	*eQAPP RPD*	*Flag*
	FTBL-SED-02-0-6-051216	**FD051216 (Dry)**			
ANTIMONY	0.228	0.204	11	50.00	No Qualifiers Applied
ARSENIC	6.21	6.18	0	50.00	
BERYLLIUM	3.12	3.04	3	50.00	
COPPER	13.9	13.9	0	50.00	
NICKEL	6.74	6.58	2	50.00	
ZINC	45.1	45.8	2	50.00	

Analyte	*Concentration (mg/Kg)*		*Sample RPD*	*eQAPP RPD*	*Flag*
	FTBL-SED-02-0-6-051216RE	**FD051216RE (Dry)**			
LEAD	20.3	18.5	9	50.00	No Qualifiers Applied

Project Name and Number: 06261038.0000 - Castner Range Fort Bliss, TX

LDC #: 36618B4a
SDG #: K1605069
Laboratory: ALS Environmental

VALIDATION COMPLETENESS WORKSHEET

ADR IV

Date: 7/13/16

[redacted]

METHOD: Metals (EPA SW 846 Method 6020A)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A/N	
II.	ICP/MS Tune	A	
III.	Instrument Calibration	A	
IV.	ICP Interference Check Sample (ICS) Analysis	A	
V.	Laboratory Blanks	SW	ICB/CCB only
VI.	Field Blanks	N	
VII.	Matrix Spike/Matrix Spike Duplicates	SW	Not reviewed for ADR validation.
VIII.	Duplicate sample analysis	N	Not reviewed for ADR validation.
IX.	Serial Dilution	A	
X.	Laboratory control samples	N	Not reviewed for ADR validation. LCS
XI.	Field Duplicates	SW (for split samples only)	Not reviewed for ADR validation. *see below (15,16)(3,4)
XII.	Internal Standard (ICP-MS)	A	
XIII.	Sample Result Verification	N	Not reviewed for ADR validation.
XIV	Overall Assessment of Data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

** Indicates sample underwent Level IV validation

	Client ID	Lab ID	Matrix	Date
1	FTBL-SED-25-0-6-051016	K1605069-001	Sediment	05/10/16
2	FTBL-SED-11-0-6-051016	K1605069-002	Sediment	05/10/16
3	FTBL-SED-12-0-6-051016	K1605069-003	Sediment	05/10/16
4	FD051016	K1605069-004	Sediment	05/10/16
5	FTBL-SED-13-0-6-051016**	K1605069-005**	Sediment	05/10/16
6	FTBL-SED-20-0-6-051116**	K1605069-006**	Sediment	05/11/16
7	FTBL-SED-20-12-18-051116**	K1605069-007**	Sediment	05/11/16
8	FTBL-SED-19-0-6-051116**	K1605069-008**	Sediment	05/11/16
9	FTBL-SED-19-12-18-051116**	K1605069-009**	Sediment	05/11/16
10	FTBL-SED-18-0-6-051116**	K1605069-010**	Sediment	05/11/16
11	FTBL-SED-17-0-6-051116**	K1605069-011**	Sediment	05/11/16
12	FTBL-SED-16-0-6-051116	K1605069-012	Sediment	05/11/16
13	FTBL-SED-52-0-6-051116	K1605069-013	Sediment	05/11/16
14	FTBL-SED-01-0-6-051216	K1605069-014	Sediment	05/12/16
15	FTBL-SED-02-0-6-051216	K1605069-015	Sediment	05/12/16

* split = (3, FTBL-SED-12-0-6-051016 (SDG: FA33973))
= (15, FTBL-SED-02-0-6-051216-QA ↓)

LDC #: 36618B4a
SDG #: K1605069
Laboratory: ALS Environmental

VALIDATION COMPLETENESS WORKSHEET
ADR/IV

Date: 7/13/16
[redacted]

METHOD: Metals (EPA SW 846 Method 6020A)

	Client ID	Lab ID	Matrix	Date
16	FD051216	K1605069-016	Sediment	05/12/16
17	FTBL-SED-03-0-6-051216	K1605069-017	Sediment	05/12/16
18	FTBL-SED-04-0-6-051216	K1605069-018	Sediment	05/12/16
19	FTBL-SED-05-0-6-051216	K1605069-019	Sediment	05/12/16
20	FTBL-SED-25-0-6-051016MS	K1605069-001MS	Sediment	05/10/16
21	FTBL-SED-25-0-6-051016MSD	K1605069-001MSD	Sediment	05/10/16
22				
23				
24				
25				
26				

Notes:

LDC #: 36618B4a

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

[redacted]

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000) Soil preparation factor applied: 100x x 5xdil
Sample Concentration units, unless otherwise noted: ug/L Associated Samples: 13-19

				Sample Identification										
Analyte	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Level	No qualifiers (>5x)										
Sb		0.020	0.05											

Sample Concentration units, unless otherwise noted: ug/L Associated Samples: 1-12

				Sample Identification										
Analyte	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Level	No qualifiers (>5x)										
Sb		0.021	0.0525											

Samples with analyte concentrations within five times the associated ICB, CCB or PB concentration are listed above with the identifications from the Validation Completeness Worksheet. These sample results were qualified as not detected, "U".
Note : a - The listed analyte concentration is the highest ICB, CCB, or PB detected in the analysis of each element.

LDC#: 36408A4b

VALIDATION FINDINGS WORKSHEET
Split Duplicates

[redacted]

METHOD: Metals (EPA Method 6010B/7000)

Analyte	Concentration (mg/Kg)		RPD (≤50)	Qualifiers (Parents Only)
	3	FTBL-SED-12-0-6-051016-QA		
Antimony	0.263	2.1U	155	~~NQ (<LOQ)~~ J/UJ/A
Arsenic	9.13	17.2	61	Jdet/A
Beryllium	2.08	1.5	32	
Copper	32.2	29.3	9	
Lead	36.0	34.8	3	
Nickel	15.3	13.9	10	
Zinc	318	309	3	

Analyte	Concentration (mg/Kg)		RPD (≤50)	Qualifiers (Parents Only)
	15	FTBL-SED-02-0-6-051216-QA		
Antimony	0.228	9.5U	191	~~NQ (<LOQ)~~ J/UJ/A
Arsenic	6.21	8.0	25	
Beryllium	3.12	3.2	3	
Copper	13.9	13.1	6	
Lead	20.3	20.8	2	
Nickel	6.74	7.1	5	
Zinc	45.1	60.3	29	

\\LDCFILESERVER\Validation\FIELD DUPLICATES\FD_inorganic\36618B4a.wpd

Enclosure II

Level IV Data Validation Reports

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Fort Bliss, Castner Range

LDC Report Date: July 20, 2016

Parameters: Metals

Validation Level: Level IV

Laboratory: ALS Environmental

Sample Delivery Group (SDG): K1605069

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
FTBL-SED-13-0-6-051016	K1605069-005	Sediment	05/10/16
FTBL-SED-20-0-6-051116	K1605069-006	Sediment	05/11/16
FTBL-SED-20-12-18-051116	K1605069-007	Sediment	05/11/16
FTBL-SED-19-0-6-051116	K1605069-008	Sediment	05/11/16
FTBL-SED-19-12-18-051116	K1605069-009	Sediment	05/11/16
FTBL-SED-18-0-6-051116	K1605069-010	Sediment	05/11/16
FTBL-SED-17-0-6-051116	K1605069-011	Sediment	05/11/16

Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Final Quality Assurance Project Plan, Military Munitions Response Program Remedial Investigation, Closed Castner Firing Range, Fort Bliss, El Paso, Texas (February 2015), the U.S. Department of Defense (DoD) Quality Systems Manual (QSM) for Environmental Laboratories, Version 5.0 (July 2013), and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines (CLPNFG) for Inorganic Superfund Data Review (October 2004). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Antimony, Arsenic, Beryllium, Copper, Lead, Nickel, and Zinc by Environmental Protection Agency (EPA) SW 846 Method 6020A

All sample results were subjected to Level IV evaluation, which is comprised of the quality control (QC) summary forms as well as the raw data, to confirm sample quantitation and identification.

The following are definitions of the data qualifiers utilized during data validation:

J (Estimated): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated due to non-conformances discovered during data validation.

U (Non-detected): The compound or analyte was analyzed for and positively identified by the laboratory; however the compound or analyte should be considered non-detected at the reported concentration due to the presence of contaminants detected in the associated blank(s).

UJ (Non-detected estimated): The compound or analyte was reported as not detected by the laboratory; however the reported quantitation/detection limit is estimated due to non-conformances discovered during data validation.

R (Rejected): The sample results were rejected due to gross non-conformances discovered during data validation. Data qualified as rejected is not usable.

NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected compound or analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

I. Sample Receipt and Technical Holding Times

All samples were received in good condition.

All technical holding time requirements were met.

II. ICPMS Tune

The mass calibration was within 0.1 AMU and the percent relative standard deviation (%RSD) was less than or equal to 5%.

III. Instrument Calibration

Initial and continuing calibrations were performed as required by the method.

The initial calibration verification (ICV) and continuing calibration verification (CCV) standards were within QC limits.

IV. ICP Interference Check Sample Analysis

The frequency of interference check sample (ICS) analysis was met. All criteria were within QC limits.

V. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks with the following exceptions:

Blank ID	Analyte	Maximum Concentration	Associated Samples
ICB/CCB	Antimony	0.021 ug/L	All samples in SDG K1605069

Data qualification by the laboratory blanks was based on the maximum contaminant concentration in the laboratory blanks in the analysis of each analyte. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated laboratory blanks.

VI. Field Blanks

No field blanks were identified in this SDG.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on an associated project sample. Percent recoveries (%R) and relative percent differences (RPD) were not within QC limits. No data were qualified since there were no associated samples in this SDG.

VIII. Duplicate Sample Analysis

The laboratory has indicated that there were no duplicate (DUP) analyses specified for the samples in this SDG, and therefore duplicate analyses were not performed for this SDG.

IX. Serial Dilution

Serial dilution analysis was performed on an associated project sample. The percent differences (%D) were within QC limits.

X. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

XI. Field Duplicates

No field duplicates were identified in this SDG.

XII. Internal Standards (ICP-MS)

All internal standard percent recoveries (%R) were within QC limits.

XIII. Sample Result Verification

All sample result verifications were acceptable.

XIV. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

The quality control criteria reviewed were met and are considered acceptable. Based upon the data validation all results are considered valid and usable for all purposes.

Fort Bliss, Castner Range
Metals - Data Qualification Summary - SDG K1605069

No Sample Data Qualified in this SDG

Fort Bliss, Castner Range
Metals - Laboratory Blank Data Qualification Summary - SDG K1605069

No Sample Data Qualified in this SDG

Fort Bliss, Castner Range
Metals - Field Blank Data Qualification Summary - SDG K1605069

No Sample Data Qualified in this SDG

LDC #: 36618B4a

SDG #: K1605069

Laboratory: ALS Environmental

VALIDATION COMPLETENESS WORKSHEET

~~ADR~~ IV

Date: 7/3/16

[redacted]

METHOD: Metals (EPA SW 846 Method 6020A)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A/A	
II.	ICP/MS Tune	A	
III.	Instrument Calibration	A	
IV.	ICP Interference Check Sample (ICS) Analysis	A	
V.	Laboratory Blanks	SW	~~ICB/CCB only~~
VI.	Field Blanks	N	
VII.	Matrix Spike/Matrix Spike Duplicates	SW	Not reviewed for ADR validation. MS/D
VIII.	Duplicate sample analysis	N	Not reviewed for ADR validation.
IX.	Serial Dilution	A	
X.	Laboratory control samples	A	Not reviewed for ADR validation. LCS
XI.	Field Duplicates	N	Not reviewed for ADR validation.
XII.	Internal Standard (ICP-MS)	A	
XIII.	Sample Result Verification	A	Not reviewed for ADR validation.
XIV.	Overall Assessment of Data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

** Indicates sample underwent Level IV validation

	Client ID	Lab ID	Matrix	Date
1	~~FTBL-SED-25-0-6-051016~~	K1605069-001	Sediment	~~05/10/16~~
2	FTBL-SED-11-0-6-051016	K1605069-002	Sediment	05/10/16
3	FTBL-SED-12-0-6-051016	K1605069-003	Sediment	05/10/16
4	~~FD051016~~	~~K1605069-004~~	~~Sediment~~	05/10/16
5	FTBL-SED-13-0-6-051016**	K1605069-005**	Sediment	05/10/16
6	FTBL-SED-20-0-6-051116**	K1605069-006**	Sediment	05/11/16
7	FTBL-SED-20-12-18-051116**	K1605069-007**	Sediment	05/11/16
8	FTBL-SED-19-0-6-051116**	K1605069-008**	Sediment	05/11/16
9	FTBL-SED-19-12-18-051116**	K1605069-009**	Sediment	05/11/16
10	FTBL-SED-18-0-6-051116**	K1605069-010**	Sediment	05/11/16
11	FTBL-SED-17-0-6-051116**	K1605069-011**	Sediment	05/11/16
12	~~FTBL-SED-16-0-6-051116~~	~~K1605069-012~~	~~Sediment~~	~~05/11/16~~
13	FTBL-SED-52-0-6-051116	K1605069-013	Sediment	05/11/16
14	FTBL-SED-01-0-6-051216	K1605069-014	Sediment	05/12/16
15	FTBL-SED-02-0-6-051216	K1605069-015	Sediment	05/12/16

LDC #: 36618B4a

SDG #: K1605069

Laboratory: ALS Environmental

VALIDATION COMPLETENESS WORKSHEET

ADR/IV

Date: 7/13/16

[redacted]

METHOD: Metals (EPA SW 846 Method 6020A)

	Client ID	Lab ID	Matrix	Date
16	FD051216	K1605069-016	Sediment	05/12/16
17	FTBL-SED-03-0-6-051216	K1605069-017	Sediment	05/12/16
18	FTBL-SED-04-0-6-051216	K1605069-018	Sediment	05/12/16
19	FTBL-SED-05-0-6-051216	K1605069-019	Sediment	05/12/16
20	FTBL-SED-25-0-6-051016MS	K1605069-001MS	Sediment	05/10/16
21	FTBL-SED-25-0-6-051016MSD	K1605069-001MSD	Sediment	05/10/16
22				
23				
24				
25				
26				

Notes:

LDC #: 36618B4a

VALIDATION FINDINGS CHECKLIST

[redacted]

Method: Metals (EPA SW 846 Method 6010/6020/7000)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. ICP/MS Tune				
Were all isotopes in the tuning solution mass resolution within 0.1 amu?	✓			
Were %RSD of isotopes in the tuning solution ≤5%?	✓			
III. Calibration				
Were all instruments calibrated daily, each set-up time?	✓			
Were the proper number of standards used?	✓			
Were all initial and continuing calibration verification %Rs within the 90-110% (80-120% for mercury) QC limits?	✓			
Were the low standard checks within 70-130%	✓			
Were all initial calibration correlation coefficients within limits as specified by the method?	✓			
IV. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	✓			
V. ICP Interference Check Sample				
Were ICP interference check samples performed daily?	✓			
Were the AB solution percent recoveries (%R) with the 80-120% QC limits?	✓			
VI. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and duplicate (DUP) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD or MS/DUP. Soil / Water.	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the 75-125 QC limits? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.		✓		
Were the MS/MSD or duplicate relative percent differences (RPD) ≤ 20% for waters and ≤ 35% for soil samples? A control limit of +/- RL(+/-2X RL for soil) was used for samples that were ≤ 5X the RL, including when only one of the duplicate sample values were ≤ 5X the RL.	✓			
VII. Laboratory control samples				
Was an LCS anaylzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the 80-120% QC limits for water samples and laboratory established QC limits for soils?	✓			

LDC #: 36615B4a

VALIDATION FINDINGS CHECKLIST

[redacted]

Validation Area	Yes	No	NA	Findings/Comments
VIII. Internal Standards (EPA SW 846 Method 6020/EPA 200.8)				
Were all the percent recoveries (%R) within the 30-120% (6020)/60-125% (200.8) of the intensity of the internal standard in the associated initial calibration?	✓			
If the %Rs were outside the criteria, was a reanalysis performed?			✓	
IX. ICP Serial Dilution				
Was an ICP serial dilution analyzed if analyte concentrations were > 50X the MDL (ICP)/>100X the MDL(ICP/MS)?	✓			
Were all percent differences (%Ds) < 10%?	✓			
Was there evidence of negative interference? If yes, professional judgement will be used to qualify the data.			✓	
X. Sample Result Verification				
Were RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XI. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XII. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target analytes were detected in the field duplicates.			✓	
XIII. Field blanks				
Field blanks were identified in this SDG.		✓		
Target analytes were detected in the field blanks.			✓	

LDC #: 36884A

VALIDATION FINDINGS WORKSHEET
Sample Specific Element Reference

[redacted]

All circled elements are applicable to each sample.

Sample ID	Matrix	Target Analyte List (TAL)
1-19		Al, (Sb), (As), Ba, (Be), Cd, Ca, Cr, Co, (Cu), Fe, (Pb), Mg, Mn, Hg, (Ni), K, Se, Ag, Na, Tl, V, (Zn), Mo, B, Sn, Ti, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___
QL: 20, 21		Al, (Sb), (As), Ba, (Be), Cd, Ca, Cr, Co, (Cu), Fe, (Pb), Mg, Mn, Hg, (Ni), K, Se, Ag, Na, Tl, V, (Zn), Mo, B, Sn, Ti, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___
Analysis Method		
ICP		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___
ICP-MS		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___
GFAA		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___

Comments: Mercury by CVAA if performed

LDC #: 36618B4a

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000) Soil preparation factor applied: 100x x 5xdil

[redacted]

Sample Concentration units, unless otherwise noted: ug/L Associated Samples: All

				Sample Identification										
Analyte	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Level	No qualifiers (>5x)										
Sb		0.021	0.0525											

Samples with analyte concentrations within five times the associated ICB, CCB or PB concentration are listed above with the identifications from the Validation Completeness Worksheet. These sample results were qualified as not detected, "U".
Note : a - The listed analyte concentration is the highest ICB, CCB, or PB detected in the analysis of each element.

LDC #: 36618B4

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

[redacted]

METHOD: Trace metals (EPA SW 846 Method 6010B/6020A/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a matrix spike analyzed for each matrix in this SDG?

Y N N/A Were matrix spike percent recoveries (%R) within the control limits of 75-125? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.

Y N N/A Were all duplicate sample relative percent differences (RPD) ≤ 20% for water samples and ≤35% for soil samples?

LEVEL IV ONLY:

Y N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	MS/MSD ID	Matrix	Analyte	MS %Recovery	MSD %Recovery	RPD (Limits)	Associated Samples	Qualifications
	20/21	S	Sb	69 (72-124)	63		None*	J/UJ/A a No Qual
							*associates only	

Comments:

LDC #: 36618B4

VALIDATION FINDINGS WORKSHEET
Initial and Continuing Calibration Calculation Verification

[redacted]

METHOD: Trace metals (EPA SW 846 Method 6010/6020/7000)

An initial and continuing calibration verification percent recovery (%R) was recalculated for each type of analysis using the following formula:

%R = Found x 100 / True

Where, Found = concentration (in ug/L) of each analyte measured in the analysis of the ICV or CCV solution
True = concentration (in ug/L) of each analyte in the ICV or CCV source

Standard ID	Type of Analysis	Element	Found (ug/L)	True (ug/L)	Recalculated %R	Reported %R	Acceptable (Y/N)
	ICP (Initial calibration)						
ICV	ICP/MS (Initial calibration)	Pb	25.5	25.0	102	102	Y
	CVAA (Initial calibration)						
	ICP (Continuing calibration)						
CCV10	ICP/MS (Continuing calibration)	Ni	25.0	25.0	100	100	Y
	CVAA (Continuing calibration)						

Comments:

LDC #: 66184

VALIDATION FINDINGS WORKSHEET
Level IV Recalculation Worksheet

[redacted]

METHOD: Trace metals (EPA CLP SOW ISM01.2)

Percent recoveries (%R) for an ICP interference check sample, a laboratory control sample and a matrix spike sample were recalculated using the following formula:

$$\%R = \frac{Found}{True} \times 100$$

Where, Found = Concentration of each analyte measured in the analysis of the sample. For the matrix spike calculation, Found = SSR (spiked sample result) - SR (sample result).
True = Concentration of each analyte in the source.

A sample and duplicate relative percent difference (RPD) was recalculated using the following formula:

$$RPD = \frac{|S-D|}{(S+D)/2} \times 100$$

Where, S = Original sample concentration
D = Duplicate sample concentration

An ICP serial dilution percent difference (%D) was recalculated using the following formula:

$$\%D = \frac{|I-SDR|}{I} \times 100$$

Where, I = Initial Sample Result (ug/L)
SDR = Serial Dilution Result (ug/L) (Instrument Reading x 5)

Sample ID	Type of Analysis	Element	Found / S / I (units)	True / D / SDR (units)	Recalculated %R / RPD / %D	Reported %R / RPD / %D	Acceptable (Y/N)
ICSAB	ICP interference check	Zn	22.4	25.0	90	90	Y
LCS	Laboratory control sample	Pb	916.0	1000	92	92	
20	Matrix spike	Sb	(SSR-SR) 67.581	98.4	69	69	
20/21	Duplicate	Ni	129.55	119.13	8.4	8.4	
1	ICP serial dilution	Cu	36.90	36.80	0.3	0.3	

Comments: _____

LDC #: 36618B4a

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

[redacted]

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Have results been reported and calculated correctly?
Y N N/A Are results within the calibrated range of the instruments and within the linear range of the ICP?
Y N N/A Are all detection limits below the CRDL?

Detected analyte results for Zn were recalculated and verified using the following equation:

Concentration = $\frac{(RD)(FV)(Dil)}{(In.\ Vol.)}$

RD = Raw data concentration
FV = Final volume (ml)
In. Vol. = Initial volume (ml) or weight (G)
Dil = Dilution factor

Recalculation:

$$\frac{100mL(5)(250.560ug/L)}{0.997(1.27g)(1000)} = 98.9 mg/kg$$

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
	5	Sb	0.156	0.156	Y
	6	As	10.5	10.5	
	7	Be	3.37	3.37	
	8	Cu	19.8	19.8	
	9	Pb	53.7	53.7	
	10	Ni	17.6	17.6	
	11	Zn	98.9	98.9	Y

Note: _____

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June 13, 2016

Analytical Report for Service Request No: K1605072

U.S., Inc.
2929 Briarpark Drive
Suite 300
Houston, TX 77042-3745

Range Fort Bliss, TX / 06261038.0000

Enclosed are the results of the sample(s) submitted to our laboratory May 14, 2016
For your reference, these analyses have been assigned our service request number **K1605072.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is ____ You may also contact me via

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

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Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEC UST	http://dec.alaska.gov/applications/eh/ehllabreports/USTLabs.aspx	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L14-51
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	Not available	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/portal/DIVISIONS/PublicParticipationandPermitSupport/LouisianaLaboratoryAccreditationProgram.aspx	03016
Maine DHS	Not available	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Montana DPHHS	http://www.dphhs.mt.gov/publichealth/	CERT0047
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/oqa/	WA005
North Carolina DWQ	http://www.dwqlab.org/	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/envserv/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wisconsin DNR	http://dnr.wi.gov/	998386840
Wyoming (EPA Region 8)	http://www.epa.gov/region8/water/dwhome/wyomingdi.html	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Case Narrative

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
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ALS ENVIRONMENTAL

Client:	ARCADIS U.S, Inc.	**Service Request No.:**	K1605072
Project:	Castner Range Fort Bliss, TX/ 06261038.0000	**Date Received:**	05/14/16
Sample Matrix:	Soil		

Case Narrative

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier IV validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Twenty soil samples were received for analysis at ALS Environmental on 05/14/16. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4ºC upon receipt at the laboratory.

Total Metals

Matrix Spike Recovery Exceptions:
Antimony recoveries are generally low for soil and sediment samples when digested using EPA Method 3050B. Despite anticipated low recoveries, the method is still generally prescribed because of its versatility for general metals analysis. Antimony results (in conjunction with the matrix spike recovery) from this procedure should only be used as indicators to estimate concentrations. The matrix spike and matrix spike duplicate recoveries of Antimony for sample FTBL-SED-09-0-6-050616 were below the ALS control criterion. Since low recoveries resulted from a method defect and were possibly magnified by certain matrix components, no corrective action was appropriate. Alternative procedures that specifically target Antimony are available but were not specified for this project. The associated QA/QC results (e.g. control sample, calibration standards, etc.) indicated the analysis was in control.

The matrix spike duplicate recovery of Zinc for sample FTBL-SED-09-0-6-050616 was outside the DoD QSM control criteria as a result of the heterogeneous character of the sample. The associated QA/QC results (e.g. control sample, calibration standards, etc.) indicated the analysis was in control. No further corrective action was appropriate.

No other anomalies associated with the analysis of these samples were observed.

Chain of Custody

ALS Environmental—Kelso Laboratory
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Chain o Custody

ADDRESS 1317 South 13th Ave., Kelso, WA 98626
PHONE 1 360 577 7222 FAX 1 360 636 1068
Part of the ALS Group A Campbell Brothers Limited Company

Work Order No.: KL1005072

1 of 4

Project Manager:		Bill to:	PO NUMBER:
Client Name:	Arcadis	Company:	Arcadis
Address:	630 Plaza Dr. Suite [redacted]	Address:	630 Plaza Dr. Suite 600
City, State ZIP:	Highlands Ranch CO [redacted]	City, State ZIP:	Highlands Ranch [redacted]
[redacted]	Phone: (303) 471-3079	[redacted]	
Project Name:	Fusher Range for Bliss, TX		
Project Number:	00261038.0000		
Sampler's Name:	[redacted]		

Temperature (°C):		Temp Blank Present		
Received Intact:	Yes	No	N/A	Wet Ice / Blue Ice
Cooler Custody Seals:	Yes	No	N/A	Total Containers:
Sample Custody Seals:	Yes	No	N/A	

TAT
- [x] Routine 21 day
- [ ] Same Day 100%
- [ ] Next Day ***
- [ ] 3 Day
- [ ] 5 Day 50%

Surcharges. Please call for availability

Due Date:

Sample Identification	Matrix	Date Sampled	Time Sampled	Lab ID	No. of Containers	Sb, As, Be, Cu, Pb, Ni, Zn	Comments
FTBL-SED-09-0-6-050616	S	5-6-16	09:55		1	X	
FTBL-SED-09-12-18-050616	S	5-6-16	10:05		1	X	
FTBL-SED-08-0-6-050616	S	5-6-16	10:20		1	X	
FTBL-SED-08-12-18-050616	S	5-6-16	10:35		1	X	
FTBL-SED-07-0-6-050616	S	5-6-16	11:00		1	X	
FTBL-SED-06-0-6-050616	S	5-6-16	11:10		1	X	
FTBL-SED-10-0-6-050616	S	5-6-16	11:40		1	X	
FTBL-SED-10-12-18-050616	S	5-6-16	11:55		1	X	
FTBL-SED-26-0-6-050916	S	5-9-16	09:15		1	X	
FTBL-SED-27-0-6-050916	S	5-9-16	9:50		1	X	
FTBL-SED-28-0-6-050916	S	5-9-16	10:10		1	X	

Dissolved	Ag, Al, As, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, K, Li, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Se, Si, Sn, Sr, Tl, V, Zn, Zr
Total	Ag, Al, As, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, K, Li, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Se, Si, Sn, Sr, Tl, V, Zn, Zr

Additional Methods Available Upon Request

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
[redacted]	051316/1000	[redacted]	5/14/16 1020

Chain o Custody

K1605078

2 of 4

ADDRESS 1317 South 13th Ave., Kelso, WA 98626
PHONE 1 360 577 7222 FAX 1 360 636 1068

Work Order No.:

Part of the ALS Group A Campbell Brothers Limited Company

Project Manager:		Bill to:	PO NUMBER:
Client Name:	Arcadis	ompany:	Arcadis
Address:	6230 Plaza Dr. Suite C	ddress:	6230 Plaza Dr. Suite 600
City, State ZIP:	Highlands Ranch Co	ty, State ZIP:	Highlands Ranch
[redacted]	[redacted]	e: (303) 471-3	[redacted]
Project Name:	Cashen Range Fort Bliss, TX		
Project Number:	00261038.0000		
[redacted]			

TAT
- [x] Routine 21day
- [ ] Same Day 100%
- [ ] Next Day ***
- [ ] 3 Day
- [ ] 5 Day 50%

Surcharges. Please call for availability

Due Date:

Temperature (°C):		Temp Blank Present	
Received Intact:	Yes No N/A	Wet Ice / Blue Ice	
Cooler Custody Seals:	Yes No N/A	Total Containers:	
Sample Custody Seals:	Yes No N/A		

Sample Identification	Matrix	Date Sampled	Time Sampled	Lab ID	No. of Containers	Sb, As, Be, Cu, Pb, Ni, Zn	Comments
FTBL-SED-29-0-6-050916	S	5-9-16	10:30		1	X	
FTBL-SED-30-0-6-050916	S	5-9-16	11:15		1	X	
FD 050916	S	5-9-16	—		1	X	
FTBL-SED-15-0-6-050916	S	5-9-16	13:15		1	X	
FTBL-SED-14-0-6-050916	S	5-9-16	13:40		1	X	
FTBL-SED-21-0-6-051016	S	5-10-16	1000		1	X	
FTBL-SED-22-0-6-051016	S	5-10-16	1030		1	X	
FTBL-SED-23-0-6-051016	S	5-10-16	1045		1	X	
FTBL-SED-24-0-6-051016	S	5-10-16	1110		1	X	
FTBL-SED-25-0-6-051016	S	5-10-16	1130		1	X	
FTBL-SED-11-0-6-051016	S	5-10-16	1430		1	X	

Dissolved	Ag, Al, As, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, K, Li, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Se, Si, Sn, Sr, Tl, V, Zn, Zr
Total	Ag, Al, As, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, K, Li, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Se, Si, Sn, Sr, Tl, V, Zn, Zr

Additional Methods Available Upon Request

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
[redacted]	051316/1000	[redacted]	5/14/16 1000

[redacted]

Cooler Receipt and Preservation Form

Client Arcadis Service Request K16 05072

Received: 5/14/14 Opened: 5/14/14 By: S Unloaded: 5/14/16 By: S

1. Samples were received via? *Mail* (*Fed Ex*) *UPS* *DHL* *PDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) (*Cooler*) *Box* *Envelope* *Other* _____ *NA*
3. Were custody seals on coolers? NA (Y) N If yes, how many and where? 2 front+back
   If present, were custody seals intact? (Y) N If present, were they signed and dated? (Y) N

Raw Cooler Temp	Corrected Cooler Temp	Raw Temp Blank	Corrected Temp Blank	Corr. Factor	Thermometer ID	Cooler/COC ID NA	Tracking Number NA	Filed
-0.7	-0.3	1.2	1.1	-0.1	327		783061111328	
0.6	0.3	0.3	0.0	-0.3	350		8094 0906 3377	

4. Packing material: *Inserts* *Baggies* (*Bubble Wrap*) *Gel Packs* (*Wet Ice*) *Dry Ice* *Sleeves* _____
5. Were custody papers properly filled out (ink, signed, etc.)? NA (Y) N
6. Did all bottles arrive in good condition (unbroken)? *Indicate in the table below.* NA (Y) N
7. Were all sample labels complete (i.e analysis, preservation, etc.)? NA (Y) N
8. Did all sample labels and tags agree with custody papers? *Indicate major discrepancies in the table on page 2.* NA (Y) N
9. Were appropriate bottles/containers and volumes received for the tests indicated? NA (Y) N
10. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* (NA) Y N
11. Were VOA vials received without headspace? *Indicate in the table below.* (NA) Y N
12. Was C12/Res negative? (NA) Y N

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Out of Temp	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, & Resolutions: _____

Page ____ *of* ____

Total Solids

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Analytical Report

Client:	ARCADIS U.S., Inc.	**Service Request:**	K1605072
Project:	Castner Range Fort Bliss, TX/06261038.0000	**Date Collected:**	05/06/16 - 05/10/16
Sample Matrix:	Soil	**Date Received:**	05/14/16
Analysis Method:	160.3 Modified	**Units:**	Percent
Prep Method:	None	**Basis:**	As Received

Solids, Total

Sample Name	Lab Code	Result	MRL	MDL	Dil.	Date Analyzed	Q
FTBL-SED-09-0-6-050616	K1605072-001	**99.4**	-	-	1	05/26/16 13:48	
FTBL-SED-09-12-18-050616	K1605072-002	**99.0**	-	-	1	05/26/16 13:48	
FTBL-SED-08-0-6-050616	K1605072-003	**99.1**	-	-	1	05/26/16 13:48	
FTBL-SED-08-12-18-050616	K1605072-004	**100**	-	-	1	05/26/16 13:48	
FTBL-SED-07-0-6-050616	K1605072-005	**99.3**	-	-	1	05/26/16 13:48	
FTBL-SED-06-0-6-050616	K1605072-006	**100**	-	-	1	05/26/16 13:48	
FTBL-SED-10-0-6-050616	K1605072-007	**99.7**	-	-	1	05/26/16 13:48	
FTBL-SED-10-12-18-050616	K1605072-008	**99.4**	-	-	1	05/26/16 13:48	
FTBL-SED-26-0-6-050916	K1605072-009	**99.7**	-	-	1	05/26/16 13:48	
FTBL-SED-27-0-6-050916	K1605072-010	**98.8**	-	-	1	05/26/16 13:48	
FTBL-SED-28-0-6-050916	K1605072-011	**99.9**	-	-	1	05/26/16 13:48	
FTBL-SED-29-0-6-050916	K1605072-012	**98.1**	-	-	1	05/26/16 13:48	
FTBL-SED-30-0-6-050916	K1605072-013	**95.3**	-	-	1	05/26/16 13:48	
FD050916	K1605072-014	**98.4**	-	-	1	05/26/16 13:48	
FTBL-SED-15-0-6-050916	K1605072-015	**97.7**	-	-	1	05/26/16 13:48	
FTBL-SED-14-0-6-050916	K1605072-016	**99.3**	-	-	1	05/26/16 13:48	
FTBL-SED-21-0-6-051016	K1605072-017	**99.4**	-	-	1	05/26/16 13:48	
FTBL-SED-22-0-6-051016	K1605072-018	**99.5**	-	-	1	05/26/16 13:48	
FTBL-SED-23-0-6-051016	K1605072-019	**99.4**	-	-	1	05/26/16 16:08	
FTBL-SED-24-0-6-051016	K1605072-020	**99.4**	-	-	1	05/26/16 16:08	

QA/QC Report

Client:	ARCADIS U.S., Inc.	**Service Request:**	K1605072
Project	Castner Range Fort Bliss, TX/06261038.0000	**Date Collected:**	05/06/16 - 05/09/16
Sample Matrix:	Soil	**Date Received:**	05/14/16
Analysis Method:	160.3 Modified	**Units:**	Percent
Prep Method:	None	**Basis:**	As Received

Replicate Sample Summary
Inorganic Parameters

Sample Name:	Lab Code:	MRL	Sample Result	Duplicate Result	Average	RPD	RPD Limit	Date Analyzed
FTBL-SED-09-0-6-050616	K1605072-001DUP	-	99.4	99.5	99.5	<1	20	05/26/16
FTBL-SED-27-0-6-050916	K1605072-010DUP	-	98.8	98.8	98.8	<1	20	05/26/16
Batch QC	K1605394-001DUP	-	85.7	86.0	85.9	<1	20	05/26/16
Batch QC	K1605538-001DUP	-	86.1	85.8	86.0	<1	20	05/26/16
Batch QC	K1605538-012DUP	-	85.1	85.3	85.2	<1	20	05/26/16

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Metals

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Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1605072
Date Collected: 05/06/16
Date Received: 05/14/16
Units: mg/Kg
Basis: DRY

Sample Name: FTBL-SED-09-0-6-050616 **Lab Code:** K1605072-001

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.046	0.023	0.009	5.0	05/24/16	05/26/16	0.190		J
Arsenic	6020A	0.46	0.09	0.04	5.0	05/24/16	05/26/16	5.15		
Beryllium	6020A	0.018	0.018	0.005	5.0	05/24/16	05/26/16	3.10		
Copper	6020A	0.09	0.09	0.04	5.0	05/24/16	05/26/16	14.3		
Lead	6020A	0.05	0.05	0.02	5.0	05/24/16	05/26/16	25.3		
Nickel	6020A	0.18	0.09	0.03	5.0	05/24/16	05/26/16	6.24		
Zinc	6020A	0.5	0.5	0.2	5.0	05/24/16	05/26/16	72.4		J

% Solids: 99.4

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1605072
Date Collected: 05/06/16
Date Received: 05/14/16
Units: mg/Kg
Basis: DRY

Sample Name: FTBL-SED-09-12-18-050616 **Lab Code:** K1605072-002

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.041	0.021	0.008	5.0	05/24/16	05/26/16	0.211		J
Arsenic	6020A	0.41	0.08	0.03	5.0	05/24/16	05/26/16	5.45		
Beryllium	6020A	0.017	0.017	0.004	5.0	05/24/16	05/26/16	3.96		
Copper	6020A	0.08	0.08	0.03	5.0	05/24/16	05/26/16	14.1		
Lead	6020A	0.04	0.04	0.02	5.0	05/24/16	05/26/16	22.1		
Nickel	6020A	0.17	0.08	0.03	5.0	05/24/16	05/26/16	6.75		
Zinc	6020A	0.4	0.4	0.2	5.0	05/24/16	05/26/16	75.0		J

% Solids: 99.0

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1605072
Date Collected: 05/06/16
Date Received: 05/14/16
Units: mg/Kg
Basis: DRY

Sample Name: FTBL-SED-08-0-6-050616 **Lab Code:** K1605072-003

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.039	0.019	0.008	5.0	05/24/16	05/26/16	0.112		J
Arsenic	6020A	0.39	0.08	0.03	5.0	05/24/16	05/26/16	4.99		
Beryllium	6020A	0.016	0.016	0.004	5.0	05/24/16	05/26/16	3.14		
Copper	6020A	0.08	0.08	0.03	5.0	05/24/16	05/26/16	15.8		
Lead	6020A	0.04	0.04	0.02	5.0	05/24/16	05/26/16	20.1		
Nickel	6020A	0.16	0.08	0.02	5.0	05/24/16	05/26/16	10.5		
Zinc	6020A	0.4	0.4	0.2	5.0	05/24/16	05/26/16	80.6		J

% Solids: 99.1

Comments:

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1605072
Date Collected: 05/06/16
Date Received: 05/14/16
Units: mg/Kg
Basis: DRY

Sample Name: FTBL-SED-08-12-18-050616 **Lab Code:** K1605072-004

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.033	0.016	0.007	5.0	05/24/16	05/26/16	0.174		J
Arsenic	6020A	0.33	0.07	0.03	5.0	05/24/16	05/26/16	4.42		
Beryllium	6020A	0.013	0.013	0.003	5.0	05/24/16	05/26/16	5.70		
Copper	6020A	0.07	0.07	0.03	5.0	05/24/16	05/26/16	11.3		
Lead	6020A	0.03	0.03	0.01	5.0	05/24/16	05/26/16	20.6		
Nickel	6020A	0.13	0.07	0.02	5.0	05/24/16	05/26/16	7.53		
Zinc	6020A	0.3	0.3	0.1	5.0	05/24/16	05/26/16	68.4		J

% Solids: 100.0

Comments:

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1605072
Date Collected: 05/06/16
Date Received: 05/14/16
Units: mg/Kg
Basis: DRY

Sample Name: FTBL-SED-07-0-6-050616 **Lab Code:** K1605072-005

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.040	0.020	0.008	5.0	05/24/16	05/26/16	0.228		J
Arsenic	6020A	0.40	0.08	0.03	5.0	05/24/16	05/26/16	5.98		
Beryllium	6020A	0.016	0.016	0.004	5.0	05/24/16	05/26/16	3.50		
Copper	6020A	0.08	0.08	0.03	5.0	05/24/16	05/26/16	20.4		
Lead	6020A	0.04	0.04	0.02	5.0	05/24/16	05/26/16	29.4		
Nickel	6020A	0.16	0.08	0.02	5.0	05/24/16	05/26/16	8.87		
Zinc	6020A	0.4	0.4	0.2	5.0	05/24/16	05/26/16	73.5		J

% Solids: 99.3

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1605072
Date Collected: 05/06/16
Date Received: 05/14/16
Units: mg/Kg
Basis: DRY

Sample Name: FTBL-SED-06-0-6-050616 **Lab Code:** K1605072-006

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.036	0.018	0.007	5.0	05/24/16	05/26/16	0.088		J
Arsenic	6020A	0.36	0.07	0.03	5.0	05/24/16	05/26/16	3.44		
Beryllium	6020A	0.014	0.014	0.004	5.0	05/24/16	05/26/16	2.16		
Copper	6020A	0.07	0.07	0.03	5.0	05/24/16	05/26/16	5.08		
Lead	6020A	0.04	0.04	0.01	5.0	05/24/16	05/26/16	15.3		
Nickel	6020A	0.14	0.07	0.02	5.0	05/24/16	05/26/16	3.02		
Zinc	6020A	0.4	0.4	0.1	5.0	05/24/16	05/26/16	38.3		J

% Solids: 100.0

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1605072
Date Collected: 05/06/16
Date Received: 05/14/16
Units: mg/Kg
Basis: DRY

Sample Name: FTBL-SED-10-0-6-050616 **Lab Code:** K1605072-007

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.037	0.018	0.007	5.0	05/24/16	05/26/16	0.186		J
Arsenic	6020A	0.37	0.07	0.03	5.0	05/24/16	05/26/16	4.21		
Beryllium	6020A	0.015	0.015	0.004	5.0	05/24/16	05/26/16	1.85		
Copper	6020A	0.07	0.07	0.03	5.0	05/24/16	05/26/16	17.0		
Lead	6020A	0.04	0.04	0.02	5.0	05/24/16	05/26/16	26.8		
Nickel	6020A	0.15	0.07	0.02	5.0	05/24/16	05/26/16	6.60		
Zinc	6020A	0.4	0.4	0.1	5.0	05/24/16	05/26/16	59.6		J

% Solids: 99.7

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1605072
Date Collected: 05/06/16
Date Received: 05/14/16
Units: mg/Kg
Basis: DRY

Sample Name: FTBL-SED-10-12-18-050616 **Lab Code:** K1605072-008

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.035	0.018	0.007	5.0	05/24/16	05/26/16	0.191		J
Arsenic	6020A	0.35	0.07	0.03	5.0	05/24/16	05/26/16	5.34		
Beryllium	6020A	0.014	0.014	0.004	5.0	05/24/16	05/26/16	2.65		
Copper	6020A	0.07	0.07	0.03	5.0	05/24/16	05/26/16	17.4		
Lead	6020A	0.04	0.04	0.01	5.0	05/24/16	05/26/16	24.7		
Nickel	6020A	0.14	0.07	0.02	5.0	05/24/16	05/26/16	8.01		
Zinc	6020A	0.4	0.4	0.1	5.0	05/24/16	05/26/16	70.3		J

% Solids: 99.4

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1605072
Date Collected: 05/09/16
Date Received: 05/14/16
Units: mg/Kg
Basis: DRY

Sample Name: FTBL-SED-26-0-6-050916 **Lab Code:** K1605072-009

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.037	0.019	0.007	5.0	05/24/16	05/26/16	0.188		J
Arsenic	6020A	0.37	0.07	0.03	5.0	05/24/16	05/26/16	4.93		
Beryllium	6020A	0.015	0.015	0.004	5.0	05/24/16	05/26/16	1.92		
Copper	6020A	0.07	0.07	0.03	5.0	05/24/16	05/26/16	18.2		
Lead	6020A	0.04	0.04	0.02	5.0	05/24/16	05/26/16	19.3		
Nickel	6020A	0.15	0.07	0.02	5.0	05/24/16	05/26/16	10.0		
Zinc	6020A	0.4	0.4	0.1	5.0	05/24/16	05/26/16	85.0		J

% Solids: 99.7

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1605072
Date Collected: 05/09/16
Date Received: 05/14/16
Units: mg/Kg
Basis: DRY

Sample Name: FTBL-SED-27-0-6-050916 **Lab Code:** K1605072-010

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.036	0.018	0.007	5.0	05/24/16	05/26/16	0.187		J
Arsenic	6020A	0.36	0.07	0.03	5.0	05/24/16	05/26/16	4.94		
Beryllium	6020A	0.014	0.014	0.004	5.0	05/24/16	05/26/16	1.72		
Copper	6020A	0.07	0.07	0.03	5.0	05/24/16	05/26/16	15.3		
Lead	6020A	0.04	0.04	0.01	5.0	05/24/16	05/26/16	18.0		
Nickel	6020A	0.14	0.07	0.02	5.0	05/24/16	05/26/16	10.6		
Zinc	6020A	0.4	0.4	0.1	5.0	05/24/16	05/26/16	75.5		J

% Solids: 98.8

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1605072
Date Collected: 05/09/16
Date Received: 05/14/16
Units: mg/Kg
Basis: DRY

Sample Name: FTBL-SED-28-0-6-050916 **Lab Code:** K1605072-011

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.037	0.018	0.007	5.0	05/24/16	06/01/16	0.195		J
Arsenic	6020A	0.37	0.07	0.03	5.0	05/24/16	06/01/16	4.05		
Beryllium	6020A	0.015	0.015	0.004	5.0	05/24/16	06/01/16	1.31		
Copper	6020A	0.07	0.07	0.03	5.0	05/24/16	06/01/16	11.0		
Lead	6020A	0.04	0.04	0.02	5.0	05/24/16	06/01/16	30.9		
Nickel	6020A	0.15	0.07	0.02	5.0	05/24/16	06/01/16	7.74		
Zinc	6020A	0.4	0.4	0.1	5.0	05/24/16	06/01/16	54.7		J

% Solids: 99.9

Comments:

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1605072
Date Collected: 05/09/16
Date Received: 05/14/16
Units: mg/Kg
Basis: DRY

Sample Name: FTBL-SED-29-0-6-050916 **Lab Code:** K1605072-012

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.039	0.020	0.008	5.0	05/24/16	05/26/16	0.125		J
Arsenic	6020A	0.39	0.08	0.03	5.0	05/24/16	05/26/16	4.20		
Beryllium	6020A	0.016	0.016	0.004	5.0	05/24/16	05/26/16	1.56		
Copper	6020A	0.08	0.08	0.03	5.0	05/24/16	05/26/16	10.7		
Lead	6020A	0.04	0.04	0.02	5.0	05/24/16	05/26/16	11.7		
Nickel	6020A	0.16	0.08	0.02	5.0	05/24/16	05/26/16	6.69		
Zinc	6020A	0.4	0.4	0.2	5.0	05/24/16	05/26/16	44.4		J

% Solids: 98.1

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1605072
Date Collected: 05/09/16
Date Received: 05/14/16
Units: mg/Kg
Basis: DRY

Sample Name: FTBL-SED-30-0-6-050916 **Lab Code:** K1605072-013

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.041	0.021	0.008	5.0	05/24/16	05/26/16	0.368		J
Arsenic	6020A	0.41	0.08	0.03	5.0	05/24/16	05/26/16	10.4		
Beryllium	6020A	0.017	0.017	0.004	5.0	05/24/16	05/26/16	2.12		
Copper	6020A	0.08	0.08	0.03	5.0	05/24/16	05/26/16	22.0		
Lead	6020A	0.04	0.04	0.02	5.0	05/24/16	05/26/16	25.2		
Nickel	6020A	0.17	0.08	0.03	5.0	05/24/16	05/26/16	15.5		
Zinc	6020A	0.4	0.4	0.2	5.0	05/24/16	05/26/16	65.7		J

% Solids: 95.3

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1605072
Date Collected: 05/09/16
Date Received: 05/14/16
Units: mg/Kg
Basis: DRY

Sample Name: FD050916 **Lab Code:** K1605072-014

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.033	0.017	0.007	5.0	05/24/16	05/26/16	0.185		J
Arsenic	6020A	0.33	0.07	0.03	5.0	05/24/16	05/26/16	5.21		
Beryllium	6020A	0.013	0.013	0.003	5.0	05/24/16	05/26/16	2.00		
Copper	6020A	0.07	0.07	0.03	5.0	05/24/16	05/26/16	12.3		
Lead	6020A	0.03	0.03	0.01	5.0	05/24/16	05/26/16	13.2		
Nickel	6020A	0.13	0.07	0.02	5.0	05/24/16	05/26/16	8.33		
Zinc	6020A	0.3	0.3	0.1	5.0	05/24/16	05/26/16	54.3		J

% Solids: 98.4

Comments:

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1605072
Date Collected: 05/09/16
Date Received: 05/14/16
Units: mg/Kg
Basis: DRY

Sample Name: FTBL-SED-15-0-6-050916 **Lab Code:** K1605072-015

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.038	0.019	0.008	5.0	05/24/16	05/26/16	0.168		J
Arsenic	6020A	0.38	0.08	0.03	5.0	05/24/16	05/26/16	4.92		
Beryllium	6020A	0.015	0.015	0.004	5.0	05/24/16	05/26/16	1.73		
Copper	6020A	0.08	0.08	0.03	5.0	05/24/16	05/26/16	15.9		
Lead	6020A	0.04	0.04	0.02	5.0	05/24/16	05/26/16	15.4		
Nickel	6020A	0.15	0.08	0.02	5.0	05/24/16	05/26/16	9.13		
Zinc	6020A	0.4	0.4	0.2	5.0	05/24/16	05/26/16	50.5		J

% Solids: 97.7

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1605072
Date Collected: 05/09/16
Date Received: 05/14/16
Units: mg/Kg
Basis: DRY

Sample Name: FTBL-SED-14-0-6-050916 **Lab Code:** K1605072-016

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.035	0.018	0.007	5.0	05/24/16	05/26/16	0.206		J
Arsenic	6020A	0.35	0.07	0.03	5.0	05/24/16	05/26/16	5.04		
Beryllium	6020A	0.014	0.014	0.004	5.0	05/24/16	05/26/16	1.26		
Copper	6020A	0.07	0.07	0.03	5.0	05/24/16	05/26/16	31.8		
Lead	6020A	0.04	0.04	0.01	5.0	05/24/16	05/26/16	24.6		
Nickel	6020A	0.14	0.07	0.02	5.0	05/24/16	05/26/16	11.3		
Zinc	6020A	0.4	0.4	0.1	5.0	05/24/16	05/26/16	63.1		J

% Solids: 99.3

Comments:

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1605072
Date Collected: 05/10/16
Date Received: 05/14/16
Units: mg/Kg
Basis: DRY

Sample Name: FTBL-SED-21-0-6-051016 **Lab Code:** K1605072-017

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.034	0.017	0.007	5.0	05/24/16	05/26/16	0.116		J
Arsenic	6020A	0.34	0.07	0.03	5.0	05/24/16	05/26/16	5.29		
Beryllium	6020A	0.013	0.013	0.003	5.0	05/24/16	05/26/16	1.24		
Copper	6020A	0.07	0.07	0.03	5.0	05/24/16	05/26/16	27.5		
Lead	6020A	0.03	0.03	0.01	5.0	05/24/16	05/26/16	13.9		
Nickel	6020A	0.13	0.07	0.02	5.0	05/24/16	05/26/16	43.3		
Zinc	6020A	0.3	0.3	0.1	5.0	05/24/16	05/26/16	102		J

% Solids: 99.4

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1605072
Date Collected: 05/10/16
Date Received: 05/14/16
Units: mg/Kg
Basis: DRY

Sample Name: FTBL-SED-22-0-6-051016 **Lab Code:** K1605072-018

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.038	0.019	0.008	5.0	05/24/16	05/26/16	0.127		J
Arsenic	6020A	0.38	0.08	0.03	5.0	05/24/16	05/26/16	4.56		
Beryllium	6020A	0.015	0.015	0.004	5.0	05/24/16	05/26/16	1.25		
Copper	6020A	0.08	0.08	0.03	5.0	05/24/16	05/26/16	25.1		
Lead	6020A	0.04	0.04	0.02	5.0	05/24/16	05/26/16	14.2		
Nickel	6020A	0.15	0.08	0.02	5.0	05/24/16	05/26/16	38.8		
Zinc	6020A	0.4	0.4	0.2	5.0	05/24/16	05/26/16	92.2		J

% Solids: 99.5

Comments:

Metals
- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1605072
Date Collected: 05/10/16
Date Received: 05/14/16
Units: mg/Kg
Basis: DRY

Sample Name: FTBL-SED-23-0-6-051016 **Lab Code:** K1605072-019

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.034	0.017	0.007	5.0	05/24/16	05/26/16	0.123		J
Arsenic	6020A	0.34	0.07	0.03	5.0	05/24/16	05/26/16	10.7		
Beryllium	6020A	0.014	0.014	0.003	5.0	05/24/16	05/26/16	1.19		
Copper	6020A	0.07	0.07	0.03	5.0	05/24/16	05/26/16	26.4		
Lead	6020A	0.03	0.03	0.01	5.0	05/24/16	05/26/16	14.9		
Nickel	6020A	0.14	0.07	0.02	5.0	05/24/16	05/26/16	37.0		
Zinc	6020A	0.3	0.3	0.1	5.0	05/24/16	05/26/16	90.5		J

% Solids: 99.4

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Project No.: 06261038.0000
Project Name: Castner Range Fort Bliss, TX
Matrix: SOIL

Service Request: K1605072
Date Collected: 05/10/16
Date Received: 05/14/16
Units: mg/Kg
Basis: DRY

Sample Name: FTBL-SED-24-0-6-051016 **Lab Code:** K1605072-020

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.040	0.020	0.008	5.0	05/24/16	05/26/16	0.119		J
Arsenic	6020A	0.40	0.08	0.03	5.0	05/24/16	05/26/16	5.49		
Beryllium	6020A	0.016	0.016	0.004	5.0	05/24/16	05/26/16	1.57		
Copper	6020A	0.08	0.08	0.03	5.0	05/24/16	05/26/16	23.8		
Lead	6020A	0.04	0.04	0.02	5.0	05/24/16	05/26/16	15.1		
Nickel	6020A	0.16	0.08	0.02	5.0	05/24/16	05/26/16	33.7		
Zinc	6020A	0.4	0.4	0.2	5.0	05/24/16	05/26/16	93.0		J

% Solids: 99.4

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: ARCADIS U.S., Inc.
Service Request: K1605072
Project No.: 06261038.0000
Date Collected:
Project Name: Castner Range Fort Bliss, TX
Date Received:
Matrix: SOIL
Units: mg/Kg
Basis: DRY

Sample Name: Method Blank
Lab Code: KQ1605187-01

Analyte	Analysis Method	LOQ	LOD	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Antimony	6020A	0.050	0.025	0.010	5.0	05/24/16	05/26/16	0.025	U	J
Arsenic	6020A	0.50	0.10	0.04	5.0	05/24/16	05/26/16	0.10	U	
Beryllium	6020A	0.020	0.020	0.005	5.0	05/24/16	05/26/16	0.020	U	
Copper	6020A	0.10	0.10	0.04	5.0	05/24/16	05/26/16	0.10	U	
Lead	6020A	0.05	0.05	0.02	5.0	05/24/16	05/26/16	0.05	U	
Nickel	6020A	0.20	0.10	0.03	5.0	05/24/16	05/26/16	0.04	J	
Zinc	6020A	0.5	0.5	0.2	5.0	05/24/16	05/26/16	0.5	U	J

% Solids: 100.0

Comments:

Metals
- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ARCADIS U.S., Inc. **Service Request:** K1605072

Project No.: 06261038.0000

Project Name: Castner Range Fort Bliss, TX

ICV Source: Inorganic Ventures **CCV Source:** ALS MIXED

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	Method
Antimony	25.0	25.2	101	25.0	25.4	102	24.9	100	6020A
Arsenic	25.0	24.6	98	25.0	25.4	102	24.7	99	6020A
Beryllium	2.5	2.5	100	25.0	24.9	100	25.0	100	6020A
Copper	12.5	12.5	100	25.0	24.9	100	24.2	97	6020A
Lead	25.0	25.5	102	25.0	25.1	100	24.5	98	6020A
Nickel	25.0	24.9	100	25.0	25.3	101	24.0	96	6020A
Zinc	25.0	24.5	98	25.0	24.3	97	24.0	96	6020A

Metals
- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ARCADIS U.S., Inc. **Service Request:** K1605072

Project No.: 06261038.0000

Project Name: Castner Range Fort Bliss, TX

ICV Source: Inorganic Ventures **CCV Source:** ALS MIXED

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	Method
Antimony				25.0	25.5	102	25.3	101	6020A
Arsenic				25.0	25.9	104	25.0	100	6020A
Beryllium				25.0	24.9	100	25.1	100	6020A
Copper				25.0	25.5	102	24.8	99	6020A
Lead				25.0	24.8	99	24.2	97	6020A
Nickel				25.0	25.5	102	24.7	99	6020A
Zinc				25.0	25.9	104	24.8	99	6020A

Metals
- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ARCADIS U.S., Inc. **Service Request:** K1605072

Project No.: 06261038.0000

Project Name: Castner Range Fort Bliss, TX

ICV Source: Inorganic Ventures **CCV Source:** ALS MIXED

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	Method
Antimony				25.0	25.1	100	25.0	100	6020A
Arsenic				25.0	25.0	100	25.3	101	6020A
Beryllium				25.0	25.3	101	25.2	101	6020A
Copper				25.0	24.2	97	25.1	100	6020A
Lead				25.0	23.8	95	23.6	94	6020A
Nickel				25.0	24.3	97	25.2	101	6020A
Zinc				25.0	24.2	97	24.7	99	6020A

Metals
- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ARCADIS U.S., Inc. **Service Request:** K1605072

Project No.: 06261038.0000

Project Name: Castner Range Fort Bliss, TX

ICV Source: Inorganic Ventures **CCV Source:** ALS MIXED

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	Method
Antimony				25.0	25.1	100	24.9	100	6020A
Arsenic				25.0	24.6	98	25.1	100	6020A
Beryllium				25.0	25.3	101	25.2	101	6020A
Copper				25.0	24.3	97	24.3	97	6020A
Lead				25.0	23.2	93	22.7	91	6020A
Nickel				25.0	24.3	97	25.0	100	6020A
Zinc				25.0	24.2	97	24.3	97	6020A

Metals
- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ARCADIS U.S., Inc. **Service Request:** K1605072

Project No.: 06261038.0000

Project Name: Castner Range Fort Bliss, TX

ICV Source: Inorganic Ventures **CCV Source:** ALS MIXED

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	Method
Antimony	25.0	23.7	95	25.0	27.5	110	25.0	100	6020A
Arsenic	25.0	24.5	98	25.0	27.4	110	25.0	100	6020A
Beryllium	2.5	2.6	104	25.0	25.0	100	25.9	104	6020A
Copper	12.5	12.4	99	25.0	27.2	109	24.7	99	6020A
Lead	25.0	25.2	101	25.0	27.4	110	24.9	100	6020A
Nickel	25.0	25.2	101	25.0	27.4	110	25.2	101	6020A
Zinc	25.0	25.4	102	25.0	27.4	110	24.5	98	6020A

Metals

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LOW LEVEL INITIAL CALIBRATION AND LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Client: ARCADIS U.S., Inc. **SDG No.:** K1605072

Contract: 06261038.0000 **Lab Code:** CASK **Case No.:** **SAS No.:**

Initial Calibration Source: Inorganic Ventures

Continuing Calibration Source: ALS MIXED

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
LLICVS									
	Antimony	0.109	0.100	109	80.0 - 120.0	MS	05/26/16	09:22	052616A
	Arsenic	0.978	1.000	98	80.0 - 120.0	MS	05/26/16	09:22	052616A
	Beryllium	0.037	0.040	92	80.0 - 120.0	MS	05/26/16	09:22	052616A
	Copper	0.221	0.200	110	80.0 - 120.0	MS	05/26/16	09:22	052616A
	Lead	0.098	0.100	98	80.0 - 120.0	MS	05/26/16	09:22	052616A
	Nickel	0.418	0.400	104	80.0 - 120.0	MS	05/26/16	09:22	052616A
	Zinc	0.916	1.000	92	80.0 - 120.0	MS	05/26/16	09:22	052616A
LLCCVS1									
	Antimony	0.120	0.100	120	70.0 - 130.0	MS	05/26/16	11:05	052616A
	Arsenic	0.990	1.000	99	70.0 - 130.0	MS	05/26/16	11:05	052616A
	Beryllium	0.042	0.040	105	70.0 - 130.0	MS	05/26/16	11:05	052616A
	Copper	0.229	0.200	114	70.0 - 130.0	MS	05/26/16	11:05	052616A
	Lead	0.102	0.100	102	70.0 - 130.0	MS	05/26/16	11:05	052616A
	Nickel	0.403	0.400	101	70.0 - 130.0	MS	05/26/16	11:05	052616A
	Zinc	1.079	1.000	108	70.0 - 130.0	MS	05/26/16	11:05	052616A
LLCCVS2									
	Antimony	0.109	0.100	109	70.0 - 130.0	MS	05/26/16	12:39	052616A
	Arsenic	1.065	1.000	106	70.0 - 130.0	MS	05/26/16	12:39	052616A
	Beryllium	0.045	0.040	112	70.0 - 130.0	MS	05/26/16	12:39	052616A
	Copper	0.212	0.200	106	70.0 - 130.0	MS	05/26/16	12:39	052616A
	Lead	0.108	0.100	108	70.0 - 130.0	MS	05/26/16	12:39	052616A
	Nickel	0.358	0.400	90	70.0 - 130.0	MS	05/26/16	12:39	052616A
	Zinc	1.189	1.000	119	70.0 - 130.0	MS	05/26/16	12:39	052616A
LLCCVS3									
	Antimony	0.107	0.100	107	70.0 - 130.0	MS	05/26/16	14:14	052616A
	Arsenic	1.021	1.000	102	70.0 - 130.0	MS	05/26/16	14:14	052616A
	Beryllium	0.051	0.040	128	70.0 - 130.0	MS	05/26/16	14:14	052616A
	Copper	0.223	0.200	112	70.0 - 130.0	MS	05/26/16	14:14	052616A
	Lead	0.104	0.100	104	70.0 - 130.0	MS	05/26/16	14:14	052616A
	Nickel	0.451	0.400	113	70.0 - 130.0	MS	05/26/16	14:14	052616A
	Zinc	1.029	1.000	103	70.0 - 130.0	MS	05/26/16	14:14	052616A

Metals

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LOW LEVEL INITIAL CALIBRATION AND LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Client: ARCADIS U.S., Inc. **SDG No.:** K1605072

Contract: 06261038.0000 **Lab Code:** CASK **Case No.:** **SAS No.:**

Initial Calibration Source: Inorganic Ventures

Continuing Calibration Source: ALS MIXED

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
LLCCVS4									
	Antimony	0.114	0.100	114	70.0 - 130.0	MS	05/26/16	14:57	052616A
	Arsenic	1.051	1.000	105	70.0 - 130.0	MS	05/26/16	14:57	052616A
	Beryllium	0.046	0.040	115	70.0 - 130.0	MS	05/26/16	14:57	052616A
	Copper	0.237	0.200	118	70.0 - 130.0	MS	05/26/16	14:57	052616A
	Lead	0.096	0.100	96	70.0 - 130.0	MS	05/26/16	14:57	052616A
	Nickel	0.386	0.400	96	70.0 - 130.0	MS	05/26/16	14:57	052616A
	Zinc	1.132	1.000	113	70.0 - 130.0	MS	05/26/16	14:57	052616A
LLICVS									
	Antimony	0.091	0.10	91	80.0 - 120.0	MS	06/01/16	07:54	060116A
	Arsenic	1.00	1.0	100	80.0 - 120.0	MS	06/01/16	07:54	060116A
	Beryllium	0.044	0.04	110	80.0 - 120.0	MS	06/01/16	07:54	060116A
	Copper	0.23	0.2	115	80.0 - 120.0	MS	06/01/16	07:54	060116A
	Lead	0.092	0.10	92	80.0 - 120.0	MS	06/01/16	07:54	060116A
	Nickel	0.41	0.4	102	80.0 - 120.0	MS	06/01/16	07:54	060116A
	Zinc	1.03	1.0	103	80.0 - 120.0	MS	06/01/16	07:54	060116A
LLCCVS1									
	Antimony	0.099	0.10	99	70.0 - 130.0	MS	06/01/16	09:10	060116A
	Arsenic	0.90	1.0	90	70.0 - 130.0	MS	06/01/16	09:10	060116A
	Beryllium	0.047	0.04	118	70.0 - 130.0	MS	06/01/16	09:10	060116A
	Copper	0.22	0.2	110	70.0 - 130.0	MS	06/01/16	09:10	060116A
	Lead	0.086	0.10	86	70.0 - 130.0	MS	06/01/16	09:10	060116A
	Nickel	0.42	0.4	105	70.0 - 130.0	MS	06/01/16	09:10	060116A
	Zinc	0.82	1.0	82	70.0 - 130.0	MS	06/01/16	09:10	060116A

Metals

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BLANKS

Client: ARCADIS U.S., Inc. **Service Request:** K1605072

Project No.: 06261038.0000

Project Name: Castner Range Fort Bliss, TX

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Method
Antimony	0.020	J	0.020	U	0.020	U	0.020	U	6020A
Arsenic	0.08	U	0.08	U	0.08	U	0.08	U	6020A
Beryllium	0.010	U	0.010	U	0.010	U	0.010	U	6020A
Copper	0.08	U	0.08	U	0.08	U	0.08	U	6020A
Lead	0.04	U	0.04	U	0.04	U	0.04	U	6020A
Nickel	0.06	U	0.06	U	0.06	U	0.06	U	6020A
Zinc	0.4	U	0.4	U	0.4	U	0.4	U	6020A

Metals

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BLANKS

Client: ARCADIS U.S., Inc. **Service Request:** K1605072

Project No.: 06261038.0000

Project Name: Castner Range Fort Bliss, TX

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Method
Antimony			0.020	U	0.023	J	0.020	U	6020A
Arsenic			0.08	U	0.08	U	0.08	U	6020A
Beryllium			0.010	U	0.012	J	0.010	U	6020A
Copper			0.08	U	0.08	U	0.08	U	6020A
Lead			0.04	U	0.04	U	0.04	U	6020A
Nickel			0.06	U	0.06	U	0.06	U	6020A
Zinc			0.4	U	0.4	U	0.4	U	6020A

Metals

- 3 -

BLANKS

Client: ARCADIS U.S., Inc. **Service Request:** K1605072

Project No.: 06261038.0000

Project Name: Castner Range Fort Bliss, TX

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Method
Antimony			0.023	J	0.020	U			6020A
Arsenic			0.08	U	0.08	U			6020A
Beryllium			0.010	U	0.010	U			6020A
Copper			0.08	U	0.08	U			6020A
Lead			0.04	U	0.04	U			6020A
Nickel			0.06	U	0.06	U			6020A
Zinc			0.4	U	0.4	U			6020A

Metals

- 3 -

BLANKS

Client: ARCADIS U.S., Inc. **Service Request:** K1605072

Project No.: 06261038.0000

Project Name: Castner Range Fort Bliss, TX

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Method
Antimony	0.020	U	0.020	U	0.020	U			6020A
Arsenic	0.08	U	0.08	U	0.08	U			6020A
Beryllium	0.010	U	0.010	U	0.010	U			6020A
Copper	0.08	U	0.08	U	0.08	U			6020A
Lead	0.04	U	0.04	U	0.04	U			6020A
Nickel	0.06	U	0.06	U	0.06	U			6020A
Zinc	0.4	U	0.4	U	0.4	U			6020A

Metals

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ICP INTERFERENCE CHECK SAMPLE

Client: ARCADIS U.S., Inc. **Service Request:** K1605072

Project No.: 06261038.0000

Project Name: Castner Range Fort Bliss, TX

ICP ID Number: **Agilent ICPMS** **ICS Source:** **Inorganic Ventures**

Concentration Units): **ug/L**

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Antimony	0.0		0.0	0.0				
Arsenic	0.0	25.0	0.1	23.0	92			
Beryllium	0.0		0.0	0.0				
Copper	0.0	50.0	0.6	45.2	90			
Lead	0.0		0.1	0.1				
Nickel	0.0	50.0	0.5	45.1	90			
Zinc	0.0	25.0	0.3	22.4	90			

Metals

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ICP INTERFERENCE CHECK SAMPLE

Client: ARCADIS U.S., Inc. **Service Request:** K1605072

Project No.: 06261038.0000

Project Name: Castner Range Fort Bliss, TX

ICP ID Number: **Agilent ICPMS** **ICS Source:** **Inorganic Ventures**

Concentration Units): **ug/L**

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Antimony	0.0		0.3	0.2				
Arsenic	0.0	25.0	0.1	22.7	91			
Beryllium	0.0		0.1	0.0				
Copper	0.0	50.0	0.6	43.5	87			
Lead	0.0		0.1	0.1				
Nickel	0.0	50.0	0.5	45.2	90			
Zinc	0.0	25.0	0.4	22.4	90			

Metals
- 5A -
SPIKE SAMPLE RECOVERY

Client: ARCADIS U.S., Inc. **Service Request:** K1605072

Project No.: 06261038.0000 **Units:** MG/KG

Project Name: Castner Range Fort Bliss, TX **Basis:** DRY

Matrix: SOIL **% Solids:** 99.4

Sample Name: FTBL-SED-09-0-6-050616S **Lab Code:** K1605072-001S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Antimony	72 - 124	51.864		0.190		91.5	56	J	6020A
Arsenic	82 - 118	93.49		5.15		91.5	97		6020A
Beryllium	80 - 120	12.737		3.101		9.1	106		6020A
Copper	84 - 119	57.68		14.33		45.7	95		6020A
Lead	84 - 118	113.34		25.35		91.5	96		6020A
Nickel	84 - 119	94.11		6.24		91.5	96		6020A
Zinc	82 - 119	153.3		72.4		91.5	88		6020A

An empty field in the Control Limit column indicates the control limit is not applicable

Metals
- 5A -
SPIKE SAMPLE RECOVERY

Client: ARCADIS U.S., Inc. **Service Request:** K1605072

Project No.: 06261038.0000 **Units:** MG/KG

Project Name: Castner Range Fort Bliss, TX **Basis:** DRY

Matrix: SOIL **% Solids:** 99.4

Sample Name: FTBL-SED-09-0-6-050616SD **Lab Code:** K1605072-001SD

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Antimony	72 - 124	45.520		0.190		80.5	56	J	6020A
Arsenic	82 - 118	81.11		5.15		80.5	94		6020A
Beryllium	80 - 120	10.974		3.101		8.0	98		6020A
Copper	84 - 119	49.90		14.33		40.2	88		6020A
Lead	84 - 118	95.46		25.35		80.5	87		6020A
Nickel	84 - 119	80.92		6.24		80.5	93		6020A
Zinc	82 - 119	134.5		72.4		80.5	77	J	6020A

An empty field in the Control Limit column indicates the control limit is not applicable

Metals
- 5B -
POST SPIKE SAMPLE RECOVERY

Client: ARCADIS U.S., Inc. **Service Request:** K1605072

Project No.: 06261038.0000 **Units:** UG/L

Project Name: Castner Range Fort Bliss, TX **Basis:** DRY

Matrix: WATER

Sample Name: FTBL-SED-09-0-6-050616A **Lab Code:** K1605072-001A

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Antimony	75 - 125	50.458		0.415		50.0	100		6020A
Arsenic	75 - 125	60.81		11.26		50.0	99		6020A
Beryllium	75 - 125	58.662		6.781		50.0	104		6020A
Copper	75 - 125	79.91		31.33		50.0	97		6020A
Lead	75 - 125	102.39		55.43		50.0	94		6020A
Nickel	75 - 125	62.35		13.65		50.0	97		6020A
Zinc	75 - 125	209.1		158.4		50.0	101		6020A

Metals

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DUPLICATES

Client:	ARCADIS U.S., Inc.	**Service Request:**	K1605072
Project No.:	06261038.0000	**Units:**	MG/KG
Project Name:	Castner Range Fort Bliss, TX	**Basis:**	DRY
Matrix:	SOIL	**% Solids:**	99.4

Sample Name: **FTBL-SED-09-0-6-050616SD** **Lab Code:** **K1605072-001SD**

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Antimony	20	51.864		45.520		13.0		6020A
Arsenic	20	93.49		81.11		14.2		6020A
Beryllium	20	12.737		10.974		14.9		6020A
Copper	20	57.68		49.90		14.5		6020A
Lead	20	113.34		95.46		17.1		6020A
Nickel	20	94.11		80.92		15.1		6020A
Zinc	20	153.3		134.5		13.1		6020A

An empty field in the Control Limit column indicates the control limit is not applicable.

Metals

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LABORATORY CONTROL SAMPLE

Client: ARCADIS U.S., Inc. **Service Request:** K1605072

Project No.: 06261038.0000

Project Name: Castner Range Fort Bliss, TX

Aqueous LCS Source: **ALS MIXED** **Solid LCS Source:**

Analyte	Aqueous (ug/L)			Solid (mg/kg)				
	True	Found	%R	True	Found	C	Limits	%R
Antimony	1000.0	986.0	99					
Arsenic	1000.0	1010.0	101					
Beryllium	100.00	99.00	99					
Copper	500.0	500.0	100					
Lead	1000.0	936.0	94					
Nickel	1000.0	980.0	98					
Zinc	1000.0	1010.0	101					

Metals

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ICP SERIAL DILUTIONS

Client: ARCADIS U.S., Inc. **Service Request:** K1605072

Project No.: 06261038.0000 **Units:** UG/L

Project Name: Castner Range Fort Bliss, TX

Sample Name: **FTBL-SED-09-0-6-050616L** **Lab Code:** **K1605072-001L**

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Antimony	0.415		0.418	J	0.7		MS
Arsenic	11.30		12.00		6.2		MS
Beryllium	6.780		6.840		0.9		MS
Copper	31.30		31.80		1.6		MS
Lead	55.40		57.40		3.6		MS
Nickel	13.60		13.60		0.0		MS
Zinc	158.0		162.0		2.5		MS

Metals

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DETECTION LIMITS

Client: ARCADIS U.S., Inc. **Service Request:** K1605072

Project No.: 06261038.0000

Project Name: Castner Range Fort Bliss, TX

ICP/ICP-MS ID #: **Agilent ICPMS**

GFAA ID #: **AA ID #:**

Analyte	Isotope	Back-ground	LOQ ug/L	LOD ug/L	MDL ug/L	M
Antimony	123		0.100	0.050	0.020	MS
Arsenic	75		1.00	0.20	0.08	MS
Beryllium	9		0.040	0.040	0.010	MS
Copper	65		0.20	0.20	0.08	MS
Lead	208		0.10	0.10	0.04	MS
Nickel	60		0.40	0.20	0.06	MS
Zinc	66		1.0	1.0	0.4	MS

Comments:

Metals
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ICP LINEAR RANGES (QUARTERLY)

Client: ARCADIS U.S., Inc. **Service Request:** K1605072

Project No.: 06261038.0000

Project Name: Castner Range Fort Bliss, TX

ICP ID Number: **Agilent ICPMS**

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Antimony	0.300	2700	6020A
Arsenic	1.000	2700	6020A
Beryllium	1.000	2700	6020A
Copper	0.300	2700	6020A
Lead	0.300	2700	6020A
Nickel	0.300	2700	6020A
Zinc	0.300	2700	6020A

Comments:

Metals
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PREPARATION LOG

Client: ARCADIS U.S., Inc. **Service Request:** K1605072

Project No.: 06261038.0000

Project Name: Castner Range Fort Bliss, TX

Method: MS

Sample ID	Preparation Date	Initial Weight (g)	Final Volume(mL)
K1605072-001	05/24/16	1.10	100.0
K1605072-001S	05/24/16	1.10	100.0
K1605072-001SD	05/24/16	1.25	100.0
K1605072-002	05/24/16	1.22	100.0
K1605072-003	05/24/16	1.30	100.0
K1605072-004	05/24/16	1.53	100.0
K1605072-005	05/24/16	1.25	100.0
K1605072-006	05/24/16	1.40	100.0
K1605072-007	05/24/16	1.37	100.0
K1605072-008	05/24/16	1.43	100.0
K1605072-009	05/24/16	1.35	100.0
K1605072-010	05/24/16	1.41	100.0
K1605072-011	05/24/16	1.37	100.0
K1605072-012	05/24/16	1.30	100.0
K1605072-013	05/24/16	1.27	100.0
K1605072-014	05/24/16	1.52	100.0
K1605072-015	05/24/16	1.34	100.0
K1605072-016	05/24/16	1.43	100.0
K1605072-017	05/24/16	1.50	100.0
K1605072-018	05/24/16	1.34	100.0
K1605072-019	05/24/16	1.48	100.0
K1605072-020	05/24/16	1.25	100.0
KQ1605187-01	05/24/16	1.00	100.0
KQ1605187-02	05/24/16	100.0	100.0

Metals

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ANALYSIS RUN LOG

Client: ARCADIS U.S., Inc. **Service Request:** K1605072

Project No.: 06261038.0000 **Run Number:** 052616A

Project Name: Castner Range Fort Bliss, TX

Instrument ID Number: Agilent ICPMS **Method:** MS

Start Date: 05/26/16 **End Date:** 05/26/16

Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
Blank	1.0	08:57			X	X							X		X				X						X	
25ppb	1.0	09:02			X	X							X		X				X						X	
ICV1	1.0	09:06			X	X							X		X				X						X	
CCV1	1.0	09:10			X	X							X		X				X						X	
ICB1	1.0	09:14			X	X							X		X				X						X	
CCB1	1.0	09:18			X	X							X		X				X						X	
LLICVS	1.0	09:22			X	X							X		X				X						X	
ICS-A1	1.0	09:26			X	X							X		X				X						X	
ICS-AB1	1.0	09:29			X	X							X		X				X						X	
ZZZZZZ	5.0	09:33																								
ZZZZZZ	20.0	09:37																								
ZZZZZZ	5.0	09:41																								
ZZZZZZ	5.0	09:45																								
ZZZZZZ	1.0	09:49																								
ZZZZZZ	5.0	09:52																								
ZZZZZZ	5.0	09:56																								
ZZZZZZ	5.0	10:00																								
ZZZZZZ	5.0	10:04																								
ZZZZZZ	5.0	10:08																								
CCV2	1.0	10:11			X	X							X		X				X						X	
CCB2	1.0	10:15			X	X							X		X				X						X	
ZZZZZZ	5.0	10:19																								
ZZZZZZ	5.0	10:23																								
ZZZZZZ	5.0	10:27																								
ZZZZZZ	5.0	10:31																								
ZZZZZZ	5.0	10:34																								
ZZZZZZ	5.0	10:38																								
ZZZZZZ	5.0	10:42																								
ZZZZZZ	5.0	10:46																								
ZZZZZZ	5.0	10:50																								
ZZZZZZ	5.0	10:54																								
CCV3	1.0	10:57			X	X							X		X				X						X	

*** - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14**

Metals
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ANALYSIS RUN LOG

Client: ARCADIS U.S., Inc. **Service Request:** K1605072

Project No.: 06261038.0000 **Run Number:** 052616A

Project Name: Castner Range Fort Bliss, TX

Instrument ID Number: Agilent ICPMS **Method:** MS

Start Date: 05/26/16 **End Date:** 05/26/16

Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CCB3	1.0	11:01			X	X							X		X				X							X	
LLCCVS1	1.0	11:05			X	X							X		X				X							X	
ZZZZZZ	5.0	11:09																									
ZZZZZZ	5.0	11:13																									
ZZZZZZ	5.0	11:17																									
ZZZZZZ	5.0	11:20																									
ZZZZZZ	5.0	11:24																									
ZZZZZZ	5.0	11:28																									
ZZZZZZ	5.0	11:32																									
ZZZZZZ	20.0	11:36																									
ZZZZZZ	5.0	11:40																									
ZZZZZZ	5.0	11:43																									
CCV4	1.0	11:47			X	X							X		X				X							X	
CCB4	1.0	11:52			X	X							X		X				X							X	
ZZZZZZ	1.0	11:57																									
ZZZZZZ	1.0	12:00																									
ZZZZZZ	5.0	12:04																									
ZZZZZZ	5.0	12:08																									
ZZZZZZ	5.0	12:12																									
ZZZZZZ	5.0	12:16																									
ZZZZZZ	5.0	12:20																									
ZZZZZZ	5.0	12:23																									
ZZZZZZ	5.0	12:27																									
CCV5	1.0	12:31			X	X							X		X				X							X	
CCB5	1.0	12:35			X	X							X		X				X							X	
LLCCVS2	1.0	12:39			X	X							X		X				X							X	
KQ1605187-01	5.0	12:42			X	X							X		X				X							X	
KQ1605187-02	20.0	12:46			X	X							X		X				X							X	
K1605072-001	5.0	12:50			X	X							X		X				X							X	
K1605072-001L	5.0	12:54			X	X							X		X				X							X	
K1605072-001A	1.0	12:58			X	X							X		X				X							X	
K1605072-001S	5.0	13:02			X	X							X		X				X							X	

*** - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14**

Metals

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ANALYSIS RUN LOG

Client: ARCADIS U.S., Inc. **Service Request:** K1605072

Project No.: 06261038.0000 **Run Number:** 052616A

Project Name: Castner Range Fort Bliss, TX

Instrument ID Number: Agilent ICPMS **Method:** MS

Start Date: 05/26/16 **End Date:** 05/26/16

Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
K1605072-001SD	5.0	13:06			X	X							X		X				X						X	
K1605072-002	5.0	13:09			X	X							X		X				X						X	
K1605072-003	5.0	13:13			X	X							X		X				X						X	
K1605072-004	5.0	13:17			X	X							X		X				X						X	
CCV6	1.0	13:21			X	X							X		X				X						X	
CCB6	1.0	13:25			X	X							X		X				X						X	
K1605072-005	5.0	13:28			X	X							X		X				X						X	
K1605072-006	5.0	13:32			X	X							X		X				X						X	
K1605072-007	5.0	13:36			X	X							X		X				X						X	
K1605072-008	5.0	13:40			X	X							X		X				X						X	
K1605072-009	5.0	13:44			X	X							X		X				X						X	
K1605072-010	5.0	13:48			X	X							X		X				X						X	
ZZZZZZ	5.0	13:51																								
K1605072-012	5.0	13:55			X	X							X		X				X						X	
K1605072-013	5.0	13:59			X	X							X		X				X						X	
K1605072-014	5.0	14:03			X	X							X		X				X						X	
CCV7	1.0	14:07			X	X							X		X				X						X	
CCB7	1.0	14:11			X	X							X		X				X						X	
LLCCVS3	1.0	14:14			X	X							X		X				X						X	
ZZZZZZ	1.0	14:18																								
ZZZZZZ	1.0	14:22																								
K1605072-015	5.0	14:26			X	X							X		X				X						X	
K1605072-016	5.0	14:30			X	X							X		X				X						X	
K1605072-017	5.0	14:34			X	X							X		X				X						X	
K1605072-018	5.0	14:37			X	X							X		X				X						X	
K1605072-019	5.0	14:41			X	X							X		X				X						X	
K1605072-020	5.0	14:45			X	X							X		X				X						X	
CCV8	1.0	14:49			X	X							X		X				X						X	
CCB8	1.0	14:53			X	X							X		X				X						X	
LLCCVS4	1.0	14:57			X	X							X		X				X						X	
ZZZZZZ	1.0	15:00																								
ZZZZZZ	1.0	15:04																								

*** - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14**

Metals

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ANALYSIS RUN LOG

Client: ARCADIS U.S., Inc. **Service Request:** K1605072

Project No.: 06261038.0000 **Run Number:** 060116A

Project Name: Castner Range Fort Bliss, TX

Instrument ID Number: Agilent ICPMS **Method:** MS

Start Date: 06/01/16 **End Date:** 06/01/16

Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
Blank	1.0	07:22			X	X							X		X				X						X	
25ppb	1.0	07:27			X	X							X		X				X						X	
ICV2	1.0	07:31			X	X							X		X				X						X	
CCV1	1.0	07:36			X	X							X		X				X						X	
ZZZZZZ	1.0	07:40																								
ICB2	1.0	07:45			X	X							X		X				X						X	
CCB1	1.0	07:50			X	X							X		X				X						X	
LLICVS	1.0	07:54			X	X							X		X				X						X	
ZZZZZZ	1.0	07:59																								
ICS-A1	1.0	08:03			X	X							X		X				X						X	
ICS-AB1	1.0	08:07			X	X							X		X				X						X	
K1605072-011	5.0	08:11			X	X							X		X				X						X	
ZZZZZZ	1.0	08:15																								
ZZZZZZ	1.0	08:19																								
ZZZZZZ	1.0	08:23																								
ZZZZZZ	5.0	08:27																								
ZZZZZZ	1.0	08:32																								
ZZZZZZ	1.0	08:36																								
ZZZZZZ	5.0	08:40																								
ZZZZZZ	1.0	08:44																								
ZZZZZZ	1.0	08:48																								
CCV2	1.0	08:52			X	X							X		X				X						X	
ZZZZZZ	1.0	08:56																								
ZZZZZZ	1.0	09:01																								
CCB2	1.0	09:06			X	X							X		X				X						X	
LLCCVS1	1.0	09:10			X	X							X		X				X						X	

*** - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14**

Metals

15-IN

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: ALS Group USA, Corp. Contract: 06261038.0000

Lab Code: CASK Case No.: NRAS No.: SDG NO.: K1605072

ICP-MS Instrument ID: Agilent ICPMS Start Date: 05/26/2016 End Date: 05/26/2016

Sample No.	Client ID	Time	Internal Standards %RI For:											
			Element Li 6_NG	Q	Element Ge 72_He	Q	Element In115_He	Q	Element Lu175_He	Q	Element	Q	Element	Q
Blank	Blank	0857	100		100		100		100					
25ppb	25ppb	0902	99		106		107		107					
ICV1	ICV	0906	99		106		106		106					
CCV1	CCV	0910	99		105		106		107					
ICB1	ICB	0914	95		102		106		105					
CCB1	CCB	0918	100		106		106		106					
LLICVS	LLICVS	0922	99		107		107		107					
ICS-A1	ICSA	0926	91		103		100		104					
ICS-AB1	ICSAB	0929	93		105		102		105					
ZZZZZZ	ZZZZZZ	0933												
ZZZZZZ	ZZZZZZ	0937												
ZZZZZZ	ZZZZZZ	0941												
ZZZZZZ	ZZZZZZ	0945												
ZZZZZZ	ZZZZZZ	0949												
ZZZZZZ	ZZZZZZ	0952												
ZZZZZZ	ZZZZZZ	0956												
ZZZZZZ	ZZZZZZ	1000												
ZZZZZZ	ZZZZZZ	1004												
ZZZZZZ	ZZZZZZ	1008												
CCV2	CCV	1011	96		107		105		106					
CCB2	CCB	1015	98		108		110		109					
ZZZZZZ	ZZZZZZ	1019												
ZZZZZZ	ZZZZZZ	1023												
ZZZZZZ	ZZZZZZ	1027												
ZZZZZZ	ZZZZZZ	1031												
ZZZZZZ	ZZZZZZ	1034												
ZZZZZZ	ZZZZZZ	1038												
ZZZZZZ	ZZZZZZ	1042												
ZZZZZZ	ZZZZZZ	1046												
ZZZZZZ	ZZZZZZ	1050												
ZZZZZZ	ZZZZZZ	1054												
CCV3	CCV	1057	96		109		111		111					
CCB3	CCB	1101	99		109		112		112					
LLCCVS1	LLCCVS1	1105	98		108		110		110					
ZZZZZZ	ZZZZZZ	1109												
ZZZZZZ	ZZZZZZ	1113												
ZZZZZZ	ZZZZZZ	1117												
ZZZZZZ	ZZZZZZ	1120												
ZZZZZZ	ZZZZZZ	1124												
ZZZZZZ	ZZZZZZ	1128												
ZZZZZZ	ZZZZZZ	1132												
ZZZZZZ	ZZZZZZ	1136												
ZZZZZZ	ZZZZZZ	1140												
ZZZZZZ	ZZZZZZ	1143												

Metals

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ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: ALS Group USA, Corp. Contract: 06261038.0000

Lab Code: CASK Case No.: NRAS No.: SDG NO.: K1605072

ICP-MS Instrument ID: Agilent ICPMS Start Date: 05/26/2016 End Date: 05/26/2016

Sample No.	Client ID	Time	Internal Standards %RI For:											
			Element Li 6_NG	Q	Element Ge 72_He	Q	Element In115_He	Q	Element Lu175_He	Q	Element	Q	Element	Q
CCV4	CCV	1147	99		110		110		111					
CCB4	CCB	1152	99		110		110		112					
ZZZZZZ	ZZZZZZ	1157												
ZZZZZZ	ZZZZZZ	1200												
ZZZZZZ	ZZZZZZ	1204												
ZZZZZZ	ZZZZZZ	1208												
ZZZZZZ	ZZZZZZ	1212												
ZZZZZZ	ZZZZZZ	1216												
ZZZZZZ	ZZZZZZ	1220												
ZZZZZZ	ZZZZZZ	1223												
ZZZZZZ	ZZZZZZ	1227												
CCV5	CCV	1231	100		113		111		113					
CCB5	CCB	1235	100		111		113		113					
LLCCVS2	LLCCVS2	1239	99		111		112		111					
KQ1605187-01	Method Blank	1242	100		112		113		114					
KQ1605187-02	Lab Control	1246	105		107		109		108					
K1605072-001	FTBL-SED-09-0-6-	1250	100		115		112		116					
K1605072-001L	FTBL-SED-09-0-6-	1254	99		114		113		114					
K1605072-001A	FTBL-SED-09-0-6-	1258	102		116		114		117					
K1605072-001S	FTBL-SED-09-0-6-	1302	100		117		112		117					
K1605072-001SD	FTBL-SED-09-0-6-	1306	98		113		109		115					
K1605072-002	FTBL-SED-09-12-1	1309	98		115		112		116					
K1605072-003	FTBL-SED-08-0-6-	1313	97		116		111		116					
K1605072-004	FTBL-SED-08-12-1	1317	97		119		111		115					
CCV6	CCV	1321	99		111		111		114					
CCB6	CCB	1325	96		108		110		113					
K1605072-005	FTBL-SED-07-0-6-	1328	98		115		111		117					
K1605072-006	FTBL-SED-06-0-6-	1332	99		116		112		116					
K1605072-007	FTBL-SED-10-0-6-	1336	99		115		113		118					
K1605072-008	FTBL-SED-10-12-1	1340	99		115		109		112					
K1605072-009	FTBL-SED-26-0-6-	1344	101		115		113		115					
K1605072-010	FTBL-SED-27-0-6-	1348	102		116		113		115					
ZZZZZZ	ZZZZZZ	1351												
K1605072-012	FTBL-SED-29-0-6-	1355	101		114		112		115					
K1605072-013	FTBL-SED-30-0-6-	1359	99		115		112		119					
K1605072-014	FD050916	1403	100		115		112		114					
CCV7	CCV	1407	100		114		112		114					
CCB7	CCB	1411	102		113		112		115					
LLCCVS3	LLCCVS3	1414	101		112		112		114					
ZZZZZZ	ZZZZZZ	1418												
ZZZZZZ	ZZZZZZ	1422												
K1605072-015	FTBL-SED-15-0-6-	1426	91		107		104		110					
K1605072-016	FTBL-SED-14-0-6-	1430	93		108		104		111					
K1605072-017	FTBL-SED-21-0-6-	1434	97		111		108		114					

Metals

15-IN

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: ALS Group USA, Corp. Contract: 06261038.0000

Lab Code: CASK Case No.: _____ NRAS No.: _____ SDG NO.: K1605072

ICP-MS Instrument ID: Agilent ICPMS Start Date: 05/26/2016 End Date: 05/26/2016

Sample No.	Client ID	Time	Internal Standards %RI For:											
			Element Li 6_NG	Q	Element Ge 72_He	Q	Element In115_He	Q	Element Lu175_He	Q	Element	Q	Element	Q
K1605072-018	FTBL-SED-22-0-6-	1437	99		113		110		116					
K1605072-019	FTBL-SED-23-0-6-	1441	100		114		112		116					
K1605072-020	FTBL-SED-24-0-6-	1445	101		115		113		117					
CCV8	CCV	1449	100		112		112		115					
CCB8	CCB	1453	99		111		111		114					
LLCCVS4	LLCCVS4	1457	99		111		110		114					
ZZZZZZ	ZZZZZZ	1500												
ZZZZZZ	ZZZZZZ	1504												

Metals

15-IN

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: ALS Group USA, Corp. Contract: 06261038.0000

Lab Code: CASK Case No.: NRAS No.: SDG NO.: K1605072

ICP-MS Instrument ID: Agilent ICPMS Start Date: 06/01/2016 End Date: 06/01/2016

Sample No.	Client ID	Time	Internal Standards %RI For:											
			Element Li 6_NG	Q	Element Ge 72_H2	Q	Element Ge 72_He	Q	Element In115_He	Q	Element Lu175_He	Q	Element	Q
Blank	Blank	0722	100		100		100		100		100			
25ppb	25ppb	0727	99		98		97		98		100			
ICV2	ICV	0731	97		97		97		99		99			
CCV1	CCV	0736	82		96		83		85		86			
ZZZZZZ	ZZZZZZ	0740												
ICB2	ICB	0745	100		100		100		99		102			
CCB1	CCB	0750	85		97		95		98		99			
LLICVS	LLICVS	0754	99		97		96		98		99			
ZZZZZZ	ZZZZZZ	0759												
ICS-A1	ICSA	0803	91		93		93		91		96			
ICS-AB1	ICSAB	0807	90		96		96		93		97			
K1605072-011	FTBL-SED-28-0-6-	0811	97		98		99		98		103			
ZZZZZZ	ZZZZZZ	0815												
ZZZZZZ	ZZZZZZ	0819												
ZZZZZZ	ZZZZZZ	0823												
ZZZZZZ	ZZZZZZ	0827												
ZZZZZZ	ZZZZZZ	0832												
ZZZZZZ	ZZZZZZ	0836												
ZZZZZZ	ZZZZZZ	0840												
ZZZZZZ	ZZZZZZ	0844												
ZZZZZZ	ZZZZZZ	0848												
CCV2	CCV	0852	98		102		101		102		102			
ZZZZZZ	ZZZZZZ	0856												
ZZZZZZ	ZZZZZZ	0901												
CCB2	CCB	0906	99		102		102		101		102			
LLCCVS1	LLCCVS1	0910	99		100		101		101		101			

Raw Data

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
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Total Solids

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
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www.alsglobal.com

Benchsheet

Service Request #:	**K1605072, KQ1605465, K1605606, T1600775**	**Run #:**	**498257**
Test:	**TS**	**Balance ID:**	**K-Balance-16**
Method:	**160.3 Modified**		

Pan ID:	Lab Code:	Tare (g)	Wet Wt. (g)	Tare + Dry Wt. (g)	Dry Weight (g)	% Total Solids	RPD
	K1605072-001	1.27	11.09	12.29	11.0	99.4	
	K1605072-001DUP	1.27	10.99	12.21	10.9	99.5	<1
	K1605072-002	1.27	10.34	11.51	10.2	99.0	
	K1605072-003	1.25	10.71	11.86	10.6	99.1	
	K1605072-004	1.25	10.18	11.43	10.2	100	
	K1605072-005	1.26	9.74	10.93	9.67	99.3	
	K1605072-006	1.26	9.81	11.08	9.82	100	
	K1605072-007	1.26	10.87	12.10	10.8	99.7	
	K1605072-008	1.27	10.35	11.56	10.3	99.4	
	K1605072-009	1.26	9.93	11.16	9.90	99.7	
	K1605072-010	1.25	10.18	11.31	10.1	98.8	
	K1605072-010DUP	1.26	10.18	11.32	10.1	98.8	<1
	K1605072-011	1.26	10.20	11.45	10.2	99.9	
	K1605072-012	1.26	10.63	11.69	10.4	98.1	
	K1605072-013	1.26	9.94	10.73	9.47	95.3	
	K1605072-014	1.26	9.95	11.05	9.79	98.4	
	K1605072-015	1.27	9.26	10.32	9.05	97.7	
	K1605072-016	1.26	9.22	10.42	9.16	99.3	
	K1605072-017	1.27	10.08	11.29	10.0	99.4	
	K1605072-018	1.27	10.94	12.16	10.9	99.5	
	K1605606-001	1.28	9.93	11.85	10.6	106	
	T1600775-001	1.27	1.00	2.26	0.990	99.0	

	Oven ID	Temp In	Temp Out	Date In	Time In	Date Out	Time Out	Thermometer ID
Oven1	**K-OVEN 07**	**105**	**105**	**5/26/2016**	**13:48**	**5/27/2016**	**08:53**	

	Cal EQID	Cal Start Value	Cal End Value	Start Date	Start Time	End Date	End Time
Calibration1	**K-Balance-16**	**1.00, 100.00**	**1.00, 100.00**	**5/26/2016**	**13:09**	**5/26/2016**	**13:48**
Calibration2	**K-Balance-16**	**1.00, 100.00**	**1.00, 100.00**	**5/27/2016**	**09:16**	**5/27/2016**	**09:21**

Comments: ZR Reviewed 5-27-16 L.J.

Benchsheet

Service Request #:	**K1605538, KQ1605474, K1605394, K1605072**	**Run #:**	**498280**
Test:	**TS**	**Balance ID:**	**K-Balance-16**
Method:	**160.3 Modified**		

Pan ID:	Lab Code:	Tare (g)	Wet Wt. (g)	Tare + Dry Wt. (g)	Dry Weight (g)	% Total Solids	RPD
	K1605538-001	1.28	10.85	10.62	9.34	86.1	
	K1605538-001DUP	1.28	10.25	10.07	8.79	85.8	<1
	K1605538-002	1.28	10.02	9.89	8.61	85.9	
	K1605538-003	1.24	10.02	9.85	8.61	85.9	
	K1605538-004	1.27	10.27	10.10	8.83	86.0	
	K1605538-005	1.27	10.12	10.05	8.78	86.8	
	K1605538-010	1.32	10.34	10.11	8.79	85.0	
	K1605538-011	1.29	10.08	9.92	8.63	85.6	
	K1605538-012	1.29	10.90	10.57	9.28	85.1	
	K1605538-012DUP	1.28	9.98	9.79	8.51	85.3	<1
	K1605538-013	1.27	10.09	9.89	8.62	85.4	
	K1605538-014	1.28	10.02	9.86	8.58	85.6	
	K1605538-015	1.27	10.72	10.49	9.22	86.0	
	K1605538-016	1.30	10.06	9.99	8.69	86.4	
	K1605394-001	1.29	10.21	10.04	8.75	85.7	
	K1605394-001DUP	1.29	9.89	9.80	8.51	86.0	<1
	K1605394-003	1.27	10.28	10.06	8.79	85.5	
	K1605394-005	1.28	9.87	9.15	7.87	79.7	
	K1605394-006	1.26	10.20	10.33	9.07	88.9	
	K1605394-007	1.28	10.05	9.85	8.57	85.3	
	K1605394-008	1.27	10.35	10.11	8.84	85.4	
	K1605072-019	1.27	9.90	11.11	9.84	99.4	
	K1605072-020	1.27	10.52	11.73	10.5	99.4	

	Oven ID	Temp In	Temp Out	Date In	Time In	Date Out	Time Out	Thermometer ID
Oven1	**K-OVEN 07**	**105**	**105**	**5/26/2016**	**16:08**	**5/27/2016**	**08:53**	

	Cal EQID	Cal Start Value	Cal End Value	Start Date	Start Time	End Date	End Time
Calibration1	**K-Balance-16**	**1.00, 100.00**	**1.00, 100.00**	**5/26/2016**	**15:51**	**5/26/2016**	**16:08**
Calibration2	**K-Balance-16**	**1.00, 100.01**	**1.00, 100.01**	**5/27/2016**	**09:27**	**5/27/2016**	**09:31**

Comments: ZR Reviewed 5-31-16 L.J.

Metals

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Preparation Information Benchsheet

Prep Run: 262057
Team: Metals
Analyst: [redacted]

Prep Workflow: MetDigSICP
Prep Method: EPA 3050B
Rush/NPDES: N/A

Status: Prepped
Current Step: Digestion

Prep Date: 05/24/2016 06:45
Due Date: 06/01/2016
Hold Date: 11/02/2016

Lab Code	Client ID	Bottle #	Initial Amt	Initial Basis	Final Volume	Spike Amt	Spike ID	Comments
KQ1605187-01	Method Blank		1.00 g		100 mL			10% HNO3, 10% HCl
KQ1605187-02	Lab Control Sample				100 mL	1 mL 2 mL 1 mL 1 mL	171671 172201 172203 172509	10% HNO3, 10% HCl
K1605072-001	FTBL-SED-09-0-6-050616	.01	1.10 g	As Received	100 mL			10% HNO3, 10% HCl
K1605072-001: KQ1605187-03	Matrix Spike	.01	1.10 g	As Received	100 mL	1 mL 2 mL 1 mL 1 mL	171671 172201 172203 172509	10% HNO3, 10% HCl
K1605072-001: KQ1605187-04	Duplicate Matrix Spike	.01	1.25 g	As Received	100 mL	1 mL 2 mL 1 mL 1 mL	171671 172201 172203 172509	10% HNO3, 10% HCl
K1605072-002	FTBL-SED-09-12-18-050616	.01	1.22 g	As Received	100 mL			10% HNO3, 10% HCl
K1605072-003	FTBL-SED-08-0-6-050616	.01	1.30 g	As Received	100 mL			10% HNO3, 10% HCl
K1605072-004	FTBL-SED-08-12-18-050616	.01	1.53 g	As Received	100 mL			10% HNO3, 10% HCl
K1605072-005	FTBL-SED-07-0-6-050616	.01	1.25 g	As Received	100 mL			10% HNO3, 10% HCl
K1605072-006	FTBL-SED-06-0-6-050616	.01	1.40 g	As Received	100 mL			10% HNO3, 10% HCl
K1605072-007	FTBL-SED-10-0-6-050616	.01	1.37 g	As Received	100 mL			10% HNO3, 10% HCl
K1605072-008	FTBL-SED-10-12-18-050616	.01	1.43 g	As Received	100 mL			10% HNO3, 10% HCl
K1605072-009	FTBL-SED-26-0-6-050916	.01	1.35 g	As Received	100 mL			10% HNO3, 10% HCl
K1605072-010	FTBL-SED-27-0-6-050916	.01	1.41 g	As Received	100 mL			10% HNO3, 10% HCl
K1605072-011	FTBL-SED-28-0-6-050916	.01	1.37 g	As Received	100 mL			10% HNO3, 10% HCl
K1605072-012	FTBL-SED-29-0-6-050916	.01	1.30 g	As Received	100 mL			10% HNO3, 10% HCl
K1605072-013	FTBL-SED-30-0-6-050916	.01	1.27 g	As Received	100 mL			10% HNO3, 10% HCl
K1605072-014	FD050916	.01	1.52 g	As Received	100 mL			10% HNO3, 10% HCl
K1605072-015	FTBL-SED-15-0-6-050916	.01	1.34 g	As Received	100 mL			10% HNO3, 10% HCl
K1605072-016	FTBL-SED-14-0-6-050916	.01	1.43 g	As Received	100 mL			10% HNO3, 10% HCl
K1605072-017	FTBL-SED-21-0-6-051016	.01	1.50 g	As Received	100 mL			10% HNO3, 10% HCl
K1605072-018	FTBL-SED-22-0-6-051016	.01	1.34 g	As Received	100 mL			10% HNO3, 10%

								HCl
K1605072-019	FTBL-SED-23-0-6-051016	.01	1.48 g	As Received	100 mL			10% HNO3, 10% HCl
K1605072-020	FTBL-SED-24-0-6-051016	.01	1.25 g	As Received	100 mL			10% HNO3, 10% HCl

24 Total Samples consisting of 20 Client Samples, 2 Client QC Samples, 2 Batch QC Samples associated with the current Prep Run.

Spiking Solutions

Name	Type	ID	Expires	Name	Type	ID	Expires
K-MET SS1	Spike	172201	12/1/2016	K-MET SS4	Spike	171671	5/23/2016
K-MET SS3	Spike	172509	7/13/2016	K-MET SS5	Spike	172203	1/28/2017

Preparation Materials

Step	Name	ID	Step	Name	ID
Digestion	Teflon Chips	69101	Digestion	K-MET 100ml Centrifuge Tube	87637
Digestion	K-MET H2O2	84550	Digestion	K-MET HNO3	87968
Digestion	K-MET HCL	87502			

Preparation Hardware / Equipment

Step	Name	Property	Value		Step	Name	Property	Value	
Digestion	K-Balance-02	Date Checked	5/23/16		Digestion	K-BlockDigester-04	Observed Temperature	95	deg C
Digestion	K-BlockDigester-04	Corrected Temperature	95	deg C	Digestion	K-BlockDigester-04	Thermometer ID 1110287		NONE
Digestion	K-BlockDigester-04	Correction Factor	0	deg C	Digestion	K-BlockDigester-04	Thermometer Location	17	NONE

Preparation Steps

Step	Started	Finished	By	Assisted By	Training?	Comments
Digestion	24-MAY-16 06:45	24-MAY-16 09:45	Keith Linn		N	

Comments

1R: 15 mins, 2R: 30 mins, 3R: 15 mins.

Review

Reviewed by: [redacted] Date: 5/25/16

METALS SPIKING SOLUTIONS CONCENTRATIONS FORM

Solution Name	Element	mLs of 1000ppm Solution	Final Volume	Solution Conc. mg/L	Enter mls Added
K-MET SS1	HNO3	50.0	1000ml	-	
	Al	100*	1000ml	200	
	Ag	100*	1000ml	5	
	Ba	100*	1000ml	100	
	Be	100*	1000ml	5	
	Cd	100*	1000ml	5	
	Co	100*	1000ml	50	
	Cr	100*	1000ml	20	
	Cu	100*	1000ml	25	
	Fe	100*	1000ml	100	
	Pb	100*	1000ml	50	
*** Add after HNO3 and before ALS-89 when making the solution	Mn	100*	1000ml	50	
	Ni	100*	1000ml	50	
	Sb***	50	1000ml	50	
	V	100*	1000ml	50	
	Zn	100*	1000ml	50	
K-MET SS2	HNO3	25.0	500ml	-	
	As	2.0	500ml	4	
	Cd	2.0	500ml	4	
	Pb	2.0	500ml	4	
	Se	2.0	500ml	4	
	Tl	2.0	500ml	4	
	Cu	2.0	500ml	4	
K-MET SS3	HNO3	25.0	500ml	-	
	As	50.0	500ml	100	
	Se	50.0	500ml	100	
	Tl	10.0	500ml	20	
	Hg	6	500	12	
K-MET SS4	HNO3	25	500ml	-	
	B	50	500ml	100	
	Mo	50	500ml	100	
K-MET SS5	HNO3	10.0	200ml	-	
	K**	20	200ml	1000	
	Na**	20	200ml	1000	
	Mg**	20	200ml	1000	
	Ca**	20	200ml	1000	

K-MET QFLCSW	HNO3	10.0	1000ml	-	
	As, Pb, Se, Tl	5.0	1000ml	2.5	
	Cd	-	-	1.25	
	Cu	2.5	1000ml	2.5	
K-MET QCP-CICV-1	Ca, Mg, Na, K	no dilution	-	2500	
	Al, Ba	no dilution	-	1000	
	Fe	no dilution	-	500	
	Co, Mn, Ni, V, Zn	no dilution	-	250	
	Cu, Ag	no dilution	-	125	
	Cr	no dilution	-	100	
	Be	no dilution	-	25	
K-MET QCP-CICV-3	As, Pb, Se, Tl	no dilution	-	500	
	Cd	no dilution	-	250	

* Denotes volume of mixed stock standard.
** Denotes 10,000 ppm individual stock standards.

Standard	mls of standard	ppm	Logbook #	Exp. Date

Preparation Information Benchsheet

Prep Run: 262057 **Prep Workflow**: MetDigSICP **Status**: Draft **Prep Date**: 05/23/2016 07:38
Team: Metals **Prep Method**: EPA 3050B **Current Step**: Digestion **Due Date**: 05/23/2016
Analyst: [redacted] **Rush/NPDES**: N/A **Hold Date**: 11/02/2016

Lab Code	Client ID	Bottle #	Target Amt	Initial Amt	Initial Basis	Final Volume	Spike Amt	Spike ID	Comments
KQ1605187-01	Method Blank		1.00 g	1.00					
KQ1605187-02	Lab Control Sample		1.00 g	1.00			1 mL 2 mL 1 mL 1 mL	171671 172201 172203 172509	
K1605072-001	FTBL-SED-09-0-6-050616	.01	1.00 g	1.10					
K1605072-001: KQ1605187-03	Matrix Spike	.01	1.00 g	1.10			1 mL 2 mL 1 mL 1 mL	171671 172201 172203 172509	
K1605072-001: KQ1605187-04	Duplicate Matrix Spike	.01	1.00 g	1.25			1 mL 2 mL 1 mL 1 mL	171671 172201 172203 172509	
K1605072-002	FTBL-SED-09-12-18-050616	.01	1.00 g	1.22					
K1605072-003	FTBL-SED-08-0-6-050616	.01	1.00 g	1.30					
K1605072-004	FTBL-SED-08-12-18-050616	.01	1.00 g	1.53					
K1605072-005	FTBL-SED-07-0-6-050616	.01	1.00 g	1.25					
K1605072-006	FTBL-SED-06-0-6-050616	.01	1.00 g	1.40					
K1605072-007	FTBL-SED-10-0-6-050616	.01	1.00 g	1.37					
K1605072-008	FTBL-SED-10-12-18-050616	.01	1.00 g	1.43					
K1605072-009	FTBL-SED-26-0-6-050916	.01	1.00 g	1.35					
K1605072-010	FTBL-SED-27-0-6-050916	.01	1.00 g	1.41					
K1605072-011	FTBL-SED-28-0-6-050916	.01	1.00 g	1.37					
K1605072-012	FTBL-SED-29-0-6-050916	.01	1.00 g	1.30					
K1605072-013	FTBL-SED-30-0-6-050916	.01	1.00 g	1.27					
K1605072-014	FD050916	.01	1.00 g	1.52					
K1605072-015	FTBL-SED-15-0-6-050916	.01	1.00 g	1.34					
K1605072-016	FTBL-SED-14-0-6-050916	.01	1.00 g	1.43					
K1605072-017	FTBL-SED-21-0-6-051016	.01	1.00 g	1.50					
K1605072-018	FTBL-SED-22-0-6-051016	.01	1.00 g	1.34					

DoD 5.0

K1605072-019	FTBL-SED-23-0-6-051016	.01	1.00 g	1.48				
K1605072-020	FTBL-SED-24-0-6-051016	.01	1.00 g	1.25				

24 Total Samples consisting of 20 Client Samples, 2 Client QC Samples, 2 Batch QC Samples associated with the current Prep Run.

Spiking Solutions

Name	Type	ID	Expires	Name	Type	ID	Expires
K-MET SS1	Spike	172201	12/1/2016	K-MET SS4	Spike	171671	5/23/2016
K-MET SS3	Spike	172509	7/13/2016	K-MET SS5	Spike	172203	1/28/2017

~~0700~~ 1445 5-27-16

1 - 0645 - 0700

2 - 0700 - 0730

3 - 0930 - 0945

Preparation Materials

BD4 T015 TL16

Preparation Hardware / Equipment

Preparation Steps

Step	Started	Finished	By	Assisted By	Training?	Comments
Digestion						

Comments

6/7

Service Request #	K1605072		
Calibration	052616AMS05		
QC in calibration	052616AMS05		
QC Service Request #	8 K1605072		
STARLIMS run #	497184 5/26/16		
CAL STD	MS20-41-C		MS20-39-D
ICV STD	39-C MS2039C	ICSAB STD	MS20-39-E
LLICV STD	40-D MS2040D	INT STD	MS20-29-I

6020 DOD Data Review Form

	Yes	No	NA
1. Mass calibration <0.1 amu?	X		
2. Resolution <0.9 amu at 10% peak height?	X		
3. Stability RSD ≤5% for five replicates?	X		
4. Appropriate standardization completed?	X		
5. ICV within 10% of true value?	X		
6. CCV's within 10% of true?	X		
7. ICB/CCB's <LOD?	X		
8. Initial Low-level cal. check ± 20%	X		
9. ICSA/ICSAB within ± 20%	X		
10. Method blank <½ the LOQ?	X		
11. LCS within 80-120% DoD limit?	X		
12. Spikes within 80-120% DoD limit?	X	X	
13. Duplicate Spike RPD <20% DoD limit?	X		
14. Serial dilution within 10%?	X		
15. Post spike within 80-120% DoD limit?	X		
16. Internal standards within 30-120%?	X		
17. Linear range established with High CCV?	X		
18. Adequate rinse out time allowed?	X		
19. Interferences checked?	X		
20. Se over MRL?		X	
21. Cd Correction Applied?		X	
22. Was run prematurely stopped, If so why?		X	

Comments: LRS=500 ppb.
Sb spikes are out of control. PDS is in control
.Report & flag

Primary Review by [redacted] Date 5/26/16
Secondary Review by [redacted] Date 5/31/16

R:\icp\misc\data review forms\icpms review form

Data Review Form

Service Request #:	**K1605072**
Instrument ID#:	**K-ICP-MS-05**
DataFile Name:	**R:\ICP\WIP\DATA\K-ICP-MS-05 (Agilent)\052616A.csv**
RUNNO:	**498184**

K1605072-001MS - Metals T

MS Recovery

6020A/Metals T - 123 Sb [He] - Recovery: 57 Limits: 72 - 124

K1605072-001DMS - Metals T

DMS Recovery

6020A/Metals T - 66 Zn [He] - Recovery: 77 Limits: 82 - 119 — Zn = 8890

6020A/Metals T - 123 Sb [He] - Recovery: 56 Limits: 72 - 124

DOD = ± 20%

Analytical Method 6020A

Primary Approver: [redacted] 5/27/16

Secondary Approver: [redacted] 5/31/16

	Sample						
		Rjct	Data File	Acq. Date-Time	Type	Sample Name	Comment
1			001CALB.	5/26/2016 8:48:09 AM	CalBlk	Rinse	
2			002CALB.	5/26/2016 8:52:51 AM	CalBlk	Prime	
3			003CALB.	5/26/2016 8:57:47 AM	CalBlk	Blank	
4			004CALS.	5/26/2016 9:02:07 AM	CalStd	25ppb	
5			005_ICV.d	5/26/2016 9:06:27 AM	ICV	ICV	
6			006_CCV.	5/26/2016 9:10:46 AM	CCV	CCV	
7			007_ICB.d	5/26/2016 9:14:36 AM	ICB	ICB	
8			008_CCB.	5/26/2016 9:18:26 AM	CCB	CCB	
9			009LICV.d	5/26/2016 9:22:15 AM	LLICV	LLICVS	
10			010ICSA.d	5/26/2016 9:26:07 AM	ICSA	ICSA	
11			011ICSB.d	5/26/2016 9:29:55 AM	ICSB	ICSAB	
12			012_PB.d	5/26/2016 9:33:45 AM	PB	KQ1605097-01	5
13			013_LCS.d	5/26/2016 9:37:34 AM	LCS	KQ1605097-02	20
14			014_ARF.d	5/26/2016 9:41:24 AM	AllRef	K1604717-001	5
15			015SMPL.	5/26/2016 9:45:11 AM	Sample	K1604717-001L	25
16			016_PDS.d	5/26/2016 9:49:02 AM	PDS	K1604717-001A	5
17	✓		017_Spk.d	5/26/2016 9:52:51 AM	Spike	K1604717-001S	5
18	✓		018_Spk.d	5/26/2016 9:56:40 AM	Spike	K1604717-001SD	5
19			019SMPL.	5/26/2016 10:00:27 AM	Sample	K1604717-002	5
20			020SMPL.	5/26/2016 10:04:16 AM	Sample	K1604717-003	5
21			021SMPL.	5/26/2016 10:08:06 AM	Sample	K1604717-004	5
22			022_CCV.	5/26/2016 10:11:58 AM	CCV	CCV	
23			023_CCB.	5/26/2016 10:15:46 AM	CCB	CCB	
24			024SMPL.	5/26/2016 10:19:37 AM	Sample	K1604717-005	5
25			025SMPL.	5/26/2016 10:23:26 AM	Sample	K1604717-006	5
26			026SMPL.	5/26/2016 10:27:16 AM	Sample	K1604717-007	5
27			027SMPL.	5/26/2016 10:31:05 AM	Sample	K1604717-008	5
28			028SMPL.	5/26/2016 10:34:53 AM	Sample	K1604717-009	5
29			029SMPL.	5/26/2016 10:38:42 AM	Sample	K1604717-010	5
30			030SMPL.	5/26/2016 10:42:31 AM	Sample	K1604717-011	5
31			031SMPL.	5/26/2016 10:46:20 AM	Sample	K1604717-012	5
32			032SMPL.	5/26/2016 10:50:10 AM	Sample	K1604717-013	5
33			033SMPL.	5/26/2016 10:54:00 AM	Sample	K1604717-014	5
34			034_CCV.	5/26/2016 10:57:50 AM	CCV	CCV	
35			035_CCB.	5/26/2016 11:01:39 AM	CCB	CCB	

	Sample						
		Rjct	Data File	Acq. Date-Time	Type	Sample Name	Comment
36			036LCCV.	5/26/2016 11:05:30 AM	LLCCV	LLCCVS	
37			037SMPL.	5/26/2016 11:09:21 AM	Sample	K1604717-015	5
38			038SMPL.	5/26/2016 11:13:14 AM	Sample	K1604717-016	5
39			039SMPL.	5/26/2016 11:17:04 AM	Sample	K1604717-017	5
40			040SMPL.	5/26/2016 11:20:54 AM	Sample	K1604717-018	5
41			041SMPL.	5/26/2016 11:24:44 AM	Sample	K1604717-019	5
42			042SMPL.	5/26/2016 11:28:34 AM	Sample	K1604717-020	5
43			043_PB.d	5/26/2016 11:32:23 AM	PB	KQ1605151-01	5
44			044_LCS.d	5/26/2016 11:36:13 AM	LCS	KQ1605151-02	20
45			045_ARF.d	5/26/2016 11:40:01 AM	AllRef	K1604717-021	5
46			046SMPL.	5/26/2016 11:43:51 AM	Sample	K1604717-021L	25
47			047_CCV.	5/26/2016 11:47:42 AM	CCV	CCV	
48			048_CCB.	5/26/2016 11:52:01 AM	CCB	CCB	
49			049SMPL.	5/26/2016 11:57:14 AM	Sample	LRSTD	
50			050_PDS.d	5/26/2016 12:00:58 PM	PDS	K1604717-021A	5
51	✓		051_Spk.d	5/26/2016 12:04:47 PM	Spike	K1604717-021S	5
52	✓		052_Spk.d	5/26/2016 12:08:35 PM	Spike	K1604717-1SD	5
53			053SMPL.	5/26/2016 12:12:24 PM	Sample	K1604717-022	5
54			054SMPL.	5/26/2016 12:16:13 PM	Sample	K1604717-023	5
55			055SMPL.	5/26/2016 12:20:03 PM	Sample	K1604717-024	5
56			056SMPL.	5/26/2016 12:23:54 PM	Sample	K1604717-025	5
57			057SMPL.	5/26/2016 12:27:43 PM	Sample	K1604717-026	5
58			058_CCV.	5/26/2016 12:31:31 PM	CCV	CCV	
59			059_CCB.	5/26/2016 12:35:20 PM	CCB	CCB	
60			060LCCV.	5/26/2016 12:39:10 PM	LLCCV	LLCCVS	
61			061_PB.d	5/26/2016 12:42:59 PM	PB	KQ1605187-01	5
62			062_LCS.d	5/26/2016 12:46:49 PM	LCS	KQ1605187-02	20
63			063_ARF.d	5/26/2016 12:50:37 PM	AllRef	K1605072-001	5
64			064SMPL.	5/26/2016 12:54:37 PM	Sample	K1605072-001L	25
65			065_PDS.d	5/26/2016 12:58:24 PM	PDS	K1605072-001A	5
66	✓		066_Spk.d	5/26/2016 1:02:13 PM	Spike	K1605072-001S	5
67	✓		067_Spk.d	5/26/2016 1:06:02 PM	Spike	K1605072-001SD	5
68			068SMPL.	5/26/2016 1:09:49 PM	Sample	K1605072-002	5
69			069SMPL.	5/26/2016 1:13:37 PM	Sample	K1605072-003	5
70			070SMPL.	5/26/2016 1:17:26 PM	Sample	K1605072-004	5

	Sample						
		Rjct	Data File	Acq. Date-Time	Type	Sample Name	Comment
71			071_CCV.	5/26/2016 1:21:14 PM	CCV	CCV	
72			072_CCB.	5/26/2016 1:25:04 PM	CCB	CCB	
73			073SMPL.	5/26/2016 1:28:54 PM	Sample	K1605072-005	5
74			074SMPL.	5/26/2016 1:32:43 PM	Sample	K1605072-006	5
75			075SMPL.	5/26/2016 1:36:33 PM	Sample	K1605072-007	5
76			076SMPL.	5/26/2016 1:40:24 PM	Sample	K1605072-008	5
77			077SMPL.	5/26/2016 1:44:13 PM	Sample	K1605072-009	5
78			078SMPL.	5/26/2016 1:48:03 PM	Sample	K1605072-010	5
79			079SMPL.	5/26/2016 1:51:51 PM	Sample	K1605072-011	5
80			080SMPL.	5/26/2016 1:55:42 PM	Sample	K1605072-012	5
81			081SMPL.	5/26/2016 1:59:31 PM	Sample	K1605072-013	5
82			082SMPL.	5/26/2016 2:03:21 PM	Sample	K1605072-014	5
83			083_CCV.	5/26/2016 2:07:11 PM	CCV	CCV	
84			084_CCB.	5/26/2016 2:11:01 PM	CCB	CCB	
85			085LCCV.	5/26/2016 2:14:51 PM	LLCCV	LLCCVS	
86			086_QC1.d	5/26/2016 2:18:42 PM	QC1	LLCCVS 2X	
87			087SMPL.	5/26/2016 2:22:33 PM	Sample	LLCCVS 1.0 ppb	
88			088SMPL.	5/26/2016 2:26:23 PM	Sample	K1605072-015	5
89			089SMPL.	5/26/2016 2:30:11 PM	Sample	K1605072-016	5
90			090SMPL.	5/26/2016 2:34:02 PM	Sample	K1605072-017	5
91			091SMPL.	5/26/2016 2:37:52 PM	Sample	K1605072-018	5
92			092SMPL.	5/26/2016 2:41:41 PM	Sample	K1605072-019	5
93			093SMPL.	5/26/2016 2:45:31 PM	Sample	K1605072-020	5
94			094_CCV.	5/26/2016 2:49:20 PM	CCV	CCV	
95			095_CCB.	5/26/2016 2:53:11 PM	CCB	CCB	
96			096LCCV.	5/26/2016 2:57:02 PM	LLCCV	LLCCVS	
97			097_QC1.d	5/26/2016 3:00:51 PM	QC1	LLCCVS 2X	
98			098SMPL.	5/26/2016 3:04:41 PM	Sample	LLCCVS 1.0 ppb	
99			099_PB.d	5/26/2016 3:08:32 PM	PB	KQ1605183-01	5
100			100_LCS.d	5/26/2016 3:12:22 PM	LCS	KQ1605183-02	20
101			101_ARF.d	5/26/2016 3:16:13 PM	AllRef	K1605069-001	5
102			102SMPL.	5/26/2016 3:20:06 PM	Sample	K1605069-001L	25
103			103_PDS.d	5/26/2016 3:23:56 PM	PDS	K1605069-001A	5
104	✓		104_Spk.d	5/26/2016 3:27:45 PM	Spike	K1605069-001S	5
105	✓		105_Spk.d	5/26/2016 3:31:36 PM	Spike	K1605069-001SD	5

Sample

		Rjct	Data File	Acq. Date-Time	Type	Sample Name	Comment
106			106SMPL.	5/26/2016 3:35:25 PM	Sample	K1605069-002	5
107			107SMPL.	5/26/2016 3:39:15 PM	Sample	K1605069-003	5
108			108SMPL.	5/26/2016 3:43:06 PM	Sample	K1605069-004	5
109			109_CCV.	5/26/2016 3:46:55 PM	CCV	CCV	
110			110_CCB.	5/26/2016 3:50:46 PM	CCB	CCB	
111			111SMPL.	5/26/2016 3:54:36 PM	Sample	K1605069-005	5
112	✓		112SMPL.	5/26/2016 3:58:25 PM	Sample	LRSTD	
113			113SMPL.	5/26/2016 4:02:11 PM	Sample	K1605069-006	5
114			114SMPL.	5/26/2016 4:05:59 PM	Sample	K1605069-007	5
115			115SMPL.	5/26/2016 4:09:48 PM	Sample	K1605069-008	5
116			116SMPL.	5/26/2016 4:13:36 PM	Sample	K1605069-009	5
117			117SMPL.	5/26/2016 4:17:25 PM	Sample	K1605069-010	5
118			118SMPL.	5/26/2016 4:21:13 PM	Sample	K1605069-011	5
119			119SMPL.	5/26/2016 4:25:02 PM	Sample	K1605069-012	5
120	✓		120SMPL.	5/26/2016 4:28:54 PM	Sample	LRSTD	
121			121_CCV.	5/26/2016 4:33:29 PM	CCV	CCV	
122			122_CCB.	5/26/2016 4:37:18 PM	CCB	CCB	
123	✓		123LCCV.	5/26/2016 4:41:09 PM	LLCCV	LLCCVS	
124			124LCCV.	5/26/2016 4:45:00 PM	LLCCV	LLCCVS	

Analyte

	Name	Mass	ISTD	Tune Mode
1	Be	9	6	No Gas
2	Ni	60	72	He
3	Ni	62	72	He
4	Cu	63	72	He
5	Cu	65	72	He
6	Zn	66	72	He
7	As	75	72	He
8	Se	77	72	H2
9	Se	78	72	H2
10	Sb	121	115	He
11	Sb	123	115	He
12	[Pb]	206	175	He
13	[Pb]	207	175	He
14	Pb	208	175	He

Analyte

Name		Mass	ISTD	Tune Mode
15	Li	6		No Gas
16	Sc	45		No Gas
17	Sc	45		He
18	Sc	45		H2
19	Ge	72		No Gas
20	Ge	72		He
21	Ge	72		H2
22	In	115		He
23	Lu	175		He

Run terminated pb out of control

Sample

		Rjct	Data File	Acq. Date-Time	Type	Sample Name	Comment
125			125SMPL.	5/26/2016 4:52:51 PM	Sample	K1605069-013	5
126			126SMPL.	5/26/2016 4:56:39 PM	Sample	K1605069-014	5
127			127SMPL.	5/26/2016 5:00:28 PM	Sample	K1605069-015	5
128			128SMPL.	5/26/2016 5:04:18 PM	Sample	K1605069-016	5
129			129SMPL.	5/26/2016 5:08:08 PM	Sample	K1605069-017	5
130	✓		130SMPL.	5/26/2016 5:11:57 PM	Sample	K1605069-018	5
131			131SMPL.	5/26/2016 5:15:46 PM	Sample	K1605069-019	5
132			132_PB.d	5/26/2016 5:19:37 PM	PB	KQ1605183-01	5
133			133_LCS.d	5/26/2016 5:23:26 PM	LCS	KQ1605183-02	20
134			134SMPL.	5/26/2016 5:27:17 PM	Sample	K1604894-001	5
135	✓		135_CCV.	5/26/2016 5:31:06 PM	CCV	CCV	
136	✓		136_CCV.	5/26/2016 5:34:55 PM	CCV	CCV	
137	✓		137_CCV.	5/26/2016 5:38:46 PM	CCV	CCV	
138			138_CCB.	5/26/2016 5:42:36 PM	CCB	CCB	
139			139SMPL.	5/26/2016 5:46:26 PM	Sample	K1604894-001D	5
140			140SMPL.	5/26/2016 5:50:16 PM	Sample	K1604894-001L	5
141			141SMPL.	5/26/2016 5:54:05 PM	Sample	K1604894-001A	5
142			142SMPL.	5/26/2016 5:57:54 PM	Sample	K1604894-001S	5
143			143SMPL.	5/26/2016 6:01:42 PM	Sample	K1604894-002	5
144			144SMPL.	5/26/2016 6:05:32 PM	Sample	K1604894-003	5
145			145SMPL.	5/26/2016 6:09:21 PM	Sample	K1604894-004	5
146			146SMPL.	5/26/2016 6:13:11 PM	Sample	K1604894-005	5
147			147SMPL.	5/26/2016 6:17:02 PM	Sample	K1604894-006	5
148			148SMPL.	5/26/2016 6:20:50 PM	Sample	K1604894-007	5

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5/26/16

	Sample						
		Rjct	Data File	Acq. Date-Time	Type	Sample Name	Comment
149	✓		149_CCV.	5/26/2016 6:24:41 PM	CCV	CCV	
150			150_CCB.	5/26/2016 6:28:31 PM	CCB	CCB	
151			151SMPL.	5/26/2016 6:32:20 PM	Sample	K1604894-008	5
152			152SMPL.	5/26/2016 6:36:10 PM	Sample	K1604894-009	5
153			153SMPL.	5/26/2016 6:39:59 PM	Sample	K1604894-010	5
154			154SMPL.	5/26/2016 6:43:48 PM	Sample	K1604894-011	5
155	✓		155_CCV.	5/26/2016 6:47:39 PM	CCV	CCV	
156			156_CCB.	5/26/2016 6:51:29 PM	CCB	CCB	
157			157LCCV.	5/26/2016 6:55:19 PM	LLCCV	LLCCVS	
158			158_QC1.d	5/26/2016 6:59:07 PM	QC1	LLCCVS 2X	
159			159SMPL.	5/26/2016 7:02:56 PM	Sample	LLCCVS 1.0 ppb	

US EPA Tune Check Sample Report

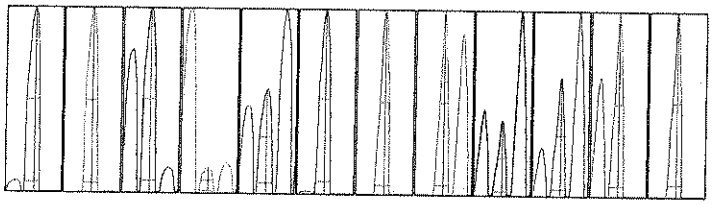
Batch Folder D:\Data\Experiments\052616A.b
Report Comment ALS Tune
Instrument Name G3281A JP13482848

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
7	39084	4.16	5.00	
9	16683	3.98	5.00	
24	93664	4.20	5.00	
25	12778	4.65	5.00	
26	15156	4.84	5.00	
59	162869	3.89	5.00	
115	250638	4.21	5.00	
206	57714	3.58	5.00	
207	51137	4.02	5.00	
208	125882	3.67	5.00	
209	194627	4.04	5.00	
238	250439	3.28	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
7	38307	36582	39941	40408	40182
9	16156	15787	17212	17081	17180
24	91257	87876	96028	96802	96357
25	12311	12048	13155	13491	12882
26	14757	14064	15611	15839	15512
59	158648	153796	166993	168186	166721
115	242626	236188	256462	259051	258865
206	56688	54566	59332	59055	58930
207	50306	47904	52158	52430	52888
208	123320	118962	129510	129306	128311
209	190195	182901	200409	198616	201016
238	246120	237933	256087	256458	255595

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
7	6406	7.05	6.9 - 7.1		0.789	0.900	
9	2798	9.00	8.9 - 9.1		0.785	0.900	
24	15180	23.95	23.9 - 24.1		0.788	0.900	
25	2041	24.95	24.9 - 25.1		0.788	0.900	
26	2442	25.95	25.9 - 26.1		0.807	0.900	
59	28529	58.95	58.9 - 59.1		0.794	0.900	
115	50496	115.00	114.9 - 115.1		0.760	0.900	
206	12469	206.00	205.9 - 206.1		0.746	0.900	
207	10954	207.00	206.9 - 207.1		0.764	0.900	
208	26935	208.00	207.9 - 208.1		0.759	0.900	
209	41486	209.00	208.9 - 209.1		0.753	0.900	
238	52359	238.00	237.9 - 238.1		0.772	0.900	

X% = 5 **Integration Time [sec] =** 0.1 **Acquisition Time [sec] =** 279 **Y Axis =** Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.57	L/min			
RF Matching	1.76	V	Option Gas	0.0	%			
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps			
S/C Temp	2	°C						

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	8.8	V			
Extract 2	-145.0	V	Cell Entrance	-30	V			
Omega Bias	-80	V	Cell Exit	-50	V			
Deflect	11.4	V						

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	false		3rd Gas Flow	0	%			
He Flow	0.0	mL/min	OctP Bias	-8.0	V			
H2 Flow	0.0	mL/min	OctP RF	190	V			
Energy Discrimination	5.0	V						

Calibration Blank Report

Sample Table

Sample Name	Blank
Data File Name	003CALB.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T08:57:47-07:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	Tune Mode	CPS	%RSD
Be	9	No Gas	17	34.60
Ni	60	He	113	4.49
Ni	62	He	29	188.75
Cu	63	He	100	23.33
Cu	65	He	51	7.36
Zn	66	He	41	41.07
As	75	He	6	833.33
Se	77	H2	651	0.84
Se	78	H2	7	597.75
Sb	121	He	79	13.21
Sb	123	He	46	58.84
[Pb]	206	He	87	46.96
[Pb]	207	He	71	16.59
Pb	208	He	336	4.74

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD
Li	6	No Gas	604198	0.26
Ge	72	He	81288	0.70
Ge	72	H2	933781	1.06
In	115	He	717634	0.96
Lu	175	He	2064230	0.17

Calibration Standard Report

Sample Table

Sample Name	25ppb
Data File Name	004CALS.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T09:02:07-07:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	CPS	%RSD
Be	9	No Gas	65047	0.00
Ni	60	He	33985	0.00
Ni	62	He	5394	0.10
Cu	63	He	98885	0.00
Cu	65	He	49694	0.00
Zn	66	He	12578	0.01
As	75	He	7886	0.02
Se	77	H2	5169	0.04
Se	78	H2	14395	0.01
Sb	121	He	52512	0.00
Sb	123	He	42453	0.00
[Pb]	206	He	145751	0.00
[Pb]	207	He	129829	0.00
Pb	208	He	597436	0.00

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	600124	1.37	604198	99.33	30	120	
Ge	72	He	85780	1.65	81288	105.53	30	120	
Ge	72	H2	1015472	1.17	933781	108.75	30	120	
In	115	He	765161	0.15	717634	106.62	30	120	
Lu	175	He	2197620	0.92	2064230	106.46	30	120	

Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICV
Data File Name	005_ICV.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T09:06:27-07:00
Sample Type	ICV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	2.536	2.133	6561	0.79	2.5	101	
Ni	60	He	24.949	1.652	34157	1.13	25	100	
Ni	62	He	24.889	3.684	5408	3.56	25	100	
Cu	63	He	12.553	0.778	50061	1.46	12.5	100	
Cu	65	He	12.515	1.417	25079	1.60	12.5	100	
Zn	66	He	24.501	1.884	12418	1.81	25	98	
As	75	He	24.639	1.558	7827	1.19	25	99	
Se	77	H2	25.194	3.152	5126	1.00	25	101	
Se	78	H2	24.734	3.048	14028	1.78	25	99	
Sb	121	He	25.287	0.288	52742	0.76	25	101	
Sb	123	He	25.207	0.438	42502	0.50	25	101	
[Pb]	206	He	24.991	0.114	145500	1.18	25	100	
[Pb]	207	He	25.905	0.822	134334	0.82	25	104	
Pb	208	He	25.494	0.569	608375	0.62	25	102	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	595373	1.45	604198	98.54	30	120	
Ge	72	He	86382	0.89	81288	106.27	30	120	
Ge	72	H2	1000609	1.72	933781	107.16	30	120	
In	115	He	759783	0.53	717634	105.87	30	120	
Lu	175	He	2194419	1.09	2064230	106.31	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	006_CCV.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T09:10:46-07:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	24.867	0.402	64335	0.03	25	99	
Ni	60	He	25.308	2.506	34316	1.78	25	101	
Ni	62	He	25.731	1.413	5536	1.07	25	103	
Cu	63	He	25.087	1.319	98993	1.45	25	100	
Cu	65	He	24.884	1.280	49337	0.55	25	100	
Zn	66	He	24.286	2.827	12193	3.01	25	97	
As	75	He	25.390	1.282	7989	0.42	25	102	
Se	77	H2	25.559	2.773	5219	2.01	25	102	
Se	78	H2	24.781	0.186	14134	0.77	25	99	
Sb	121	He	25.343	0.481	52920	0.98	25	101	
Sb	123	He	25.376	0.535	42838	0.89	25	102	
[Pb]	206	He	25.118	1.218	147384	0.45	25	100	
[Pb]	207	He	25.316	1.258	132326	1.19	25	101	
Pb	208	He	25.095	1.118	603589	0.43	25	100	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	596637	0.39	604198	98.75	30	120	
Ge	72	He	85564	0.94	81288	105.26	30	120	
Ge	72	H2	1005933	0.64	933781	107.73	30	120	
In	115	He	760665	0.57	717634	106.00	30	120	
Lu	175	He	2211789	0.78	2064230	107.15	30	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB
Data File Name	007_ICB.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T09:14:36-07:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	0.001	76.3	18	8.3	0.04	
Ni	60	He	-0.001	-3395.3	114	29.2	0.2	
Ni	62	He	-0.013	-233.1	27	21.7	0.2	
Cu	63	He	0.001	385.9	108	20.6	0.2	
Cu	65	He	0.000	4948.8	53	59.6	0.2	
Zn	66	He	0.005	341.2	44	18.9	1	
As	75	He	-0.003	-410.6	5	65.8	0.25	
Se	77	H2	-0.029	-966.6	684	8.7	20	
Se	78	H2	0.003	126.5	10	26.0	0.5	
Sb	121	He	0.005	115.4	94	12.1	0.2	
Sb	123	He	0.020	40.6	83	17.1	0.05	
[Pb]	206	He	-0.001	-371.8	86	22.2	0.1	
[Pb]	207	He	-0.004	-112.3	57	36.7	0.1	
Pb	208	He	-0.001	-25.0	324	2.1	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	575492	0.70	604198	95.25	30	120	
Ge	72	He	83248	2.28	81288	102.41	30	120	
Ge	72	H2	987725	2.03	933781	105.78	30	120	
In	115	He	758596	1.08	717634	105.71	30	120	
Lu	175	He	2163195	0.98	2064230	104.79	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	008_CCB.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T09:18:26-07:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	-0.002	-128.0	12	46.1	0.04	
Ni	60	He	0.006	61.5	129	5.4	0.2	
Ni	62	He	0.056	209.8	42	57.1	0.2	
Cu	63	He	-0.001	-105.6	101	5.0	0.2	
Cu	65	He	-0.009	-66.9	37	32.8	0.2	
Zn	66	He	0.009	444.0	48	39.7	1	
As	75	He	0.001	1541.6	7	85.3	0.25	
Se	77	H2	-0.213	-136.0	663	9.1	20	
Se	78	H2	-0.009	-35.9	3	57.7	0.5	
Sb	121	He	-0.009	-47.7	65	13.6	0.2	
Sb	123	He	-0.002	-201.2	46	14.8	0.05	
[Pb]	206	He	-0.002	-91.2	80	15.0	0.1	
[Pb]	207	He	-0.004	-129.4	56	48.1	0.1	
Pb	208	He	-0.003	-51.2	282	15.0	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	601193	1.38	604198	99.50	30	120	
Ge	72	He	86117	1.91	81288	105.94	30	120	
Ge	72	H2	1004321	1.38	933781	107.55	30	120	
In	115	He	761251	0.11	717634	106.08	30	120	
Lu	175	He	2185474	1.83	2064230	105.87	30	120	

Low Level Initial Calibration Verification (LLICV) Report

Sample Table

Sample Name	LLICVS
Data File Name	009LICV.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T09:22:15-07:00
Sample Type	LLICV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	0.037	23.875	112	20.10	0.04	92	
Ni	60	He	0.418	4.080	693	1.27	0.4	105	
Ni	62	He	0.469	12.131	132	7.27	0.4	117	
Cu	63	He	0.203	3.081	917	4.47	0.2	101	
Cu	65	He	0.221	7.164	499	6.49	0.2	111	
Zn	66	He	0.916	8.122	508	6.61	1	92	
As	75	He	0.978	2.889	318	2.27	1	98	
Se	77	H2	1.914	3.784	1043	1.14	2	96	
Se	78	H2	1.997	3.928	1151	4.24	2	100	
Sb	121	He	0.099	20.559	294	13.66	0.1	99	
Sb	123	He	0.109	14.679	235	10.59	0.1	109	
[Pb]	206	He	0.098	3.997	664	3.07	0.1	98	
[Pb]	207	He	0.102	4.724	607	3.96	0.1	102	
Pb	208	He	0.098	4.536	2712	4.77	0.1	98	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	599045	0.29	604198	99.15	30	120	
Ge	72	He	86713	2.10	81288	106.67	30	120	
Ge	72	H2	1009583	0.45	933781	108.12	30	120	
In	115	He	768918	1.02	717634	107.15	30	120	
Lu	175	He	2206597	1.80	2064230	106.90	30	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA
Data File Name	010ICSA.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T09:26:07-07:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	QC Flag
Be	9	No Gas	0.001	164.7	17	12.5	
Ni	60	He	0.462	8.1	727	6.4	
Ni	62	He	0.362	29.0	106	21.5	
Cu	63	He	0.566	7.6	2286	7.8	
Cu	65	He	0.579	11.4	1172	10.0	
Zn	66	He	0.309	29.5	193	22.4	
As	75	He	0.053	8.4	22	5.2	
Se	77	H2	0.706	24.7	768	2.8	
Se	78	H2	0.003	277.8	9	50.9	
Sb	121	He	0.000	1904.7	79	12.3	
Sb	123	He	0.018	16.2	74	5.6	
[Pb]	206	He	0.067	16.3	469	12.4	
[Pb]	207	He	0.065	6.0	401	5.1	
Pb	208	He	0.067	3.3	1906	1.7	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	549077	0.54	604198	90.88	30	120	
Ge	72	He	83658	0.97	81288	102.92	30	120	
Ge	72	H2	935502	1.40	933781	100.18	30	120	
In	115	He	718552	0.52	717634	100.13	30	120	
Lu	175	He	2136932	1.03	2064230	103.52	30	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB
Data File Name	011ICSB.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T09:29:55-07:00
Sample Type	ICSB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	0.000	-226.683	15	11.55	-1	0.0	
Ni	60	He	45.145	0.440	61083	0.87	50	90.3	
Ni	62	He	46.326	1.128	9936	0.74	50	92.7	
Cu	63	He	44.871	0.673	176840	0.74	50	89.7	
Cu	65	He	45.209	0.484	89531	0.94	50	90.4	
Zn	66	He	22.411	1.847	11246	1.34	25	89.6	
As	75	He	22.963	0.328	7221	0.29	25	91.9	
Se	77	H2	24.379	5.777	4963	3.86	25	97.5	
Se	78	H2	23.454	1.654	13253	0.75	25	93.8	
Sb	121	He	0.008	151.391	95	23.73	-1	-0.8	
Sb	123	He	0.013	12.910	68	3.76	-1	-1.3	
[Pb]	206	He	0.064	15.464	461	10.43	-1	-6.4	
[Pb]	207	He	0.073	12.849	451	7.90	-1	-7.3	
Pb	208	He	0.073	12.359	2068	6.82	-1	-7.3	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	562762	1.35	604198	93.14	30	120	
Ge	72	He	85498	0.49	81288	105.18	30	120	
Ge	72	H2	996635	1.17	933781	106.73	30	120	
In	115	He	728355	0.24	717634	101.49	30	120	
Lu	175	He	2175406	3.93	2064230	105.39	30	120	

Prep Blank (PB) Report

Sample Table

Sample Name	KQ1605097-01
Data File Name	012_PB.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T09:33:45-07:00
Sample Type	PB
Dilution	1
Comment	5
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	-0.003	-44.1	10	29.6	0.04	
Ni	60	He	0.056	48.2	201	19.1	0.2	
Ni	62	He	0.045	233.8	41	55.2	0.2	
Cu	63	He	0.013	33.1	163	10.6	0.2	
Cu	65	He	0.008	44.9	71	10.8	0.2	
Zn	66	He	0.350	24.9	226	19.2	1	
As	75	He	0.004	186.4	8	27.2	0.25	
Se	77	H2	-0.191	-31.4	678	0.2	2	
Se	78	H2	0.000	-4958.6	8	21.7	0.5	
Sb	121	He	-0.015	-34.2	55	19.9	0.1	
Sb	123	He	-0.001	-529.1	49	19.2	0.05	
[Pb]	206	He	0.012	23.6	167	11.1	0.1	
[Pb]	207	He	0.014	33.6	156	17.5	0.1	
Pb	208	He	0.012	21.3	674	10.6	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	609757	1.68	604198	100.92	30	120	
Ge	72	He	88494	1.04	81288	108.87	30	120	
Ge	72	H2	1021339	1.47	933781	109.38	30	120	
In	115	He	796149	0.39	717634	110.94	30	120	
Lu	175	He	2267269	1.08	2064230	109.84	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	KQ1605097-02
Data File Name	013_LCS.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T09:37:34-07:00
Sample Type	LCS
Dilution	1
Comment	20
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	4.981	0.387	13804	1.44	5	99.6	
Ni	60	He	51.374	0.851	72060	0.33	50	102.7	
Ni	62	He	51.298	0.482	11406	0.79	50	102.6	
Cu	63	He	25.592	0.675	104632	0.54	25	102.4	
Cu	65	He	25.713	0.758	52824	0.68	25	102.9	
Zn	66	He	52.756	1.809	27393	2.14	50	105.5	
As	75	He	51.920	0.696	16921	0.71	50	103.8	
Se	77	H2	53.899	2.184	10267	1.06	50	107.8	
Se	78	H2	52.356	1.294	29965	1.07	50	104.7	
Sb	121	He	51.040	0.992	115034	0.71	50	102.1	
Sb	123	He	50.861	0.863	92694	0.53	50	101.7	
[Pb]	206	He	49.069	2.042	301684	0.75	50	98.1	
[Pb]	207	He	50.984	1.935	279225	0.72	50	102.0	
Pb	208	He	50.155	2.066	1263993	0.99	50	100.3	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	638442	1.75	604198	105.67	30	120	
Ge	72	He	88656	0.53	81288	109.06	30	120	
Ge	72	H2	1009761	1.02	933781	108.14	30	120	
In	115	He	821705	0.37	717634	114.50	30	120	
Lu	175	He	2318626	1.85	2064230	112.32	30	120	

All Reference Sample Report

Sample Table

Sample Name	K1604717-001
Data File Name	014_ARF.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T09:41:24-07:00
Sample Type	AllRef
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	2.324	1.45	5980	0.04	
Ni	60	He	19.700	0.35	26722	0.07	
Ni	62	He	20.745	4.75	4465	0.46	
Cu	63	He	41.451	0.99	163358	0.03	
Cu	65	He	41.207	1.20	81601	0.05	
Zn	66	He	123.192	1.06	61626	0.20	
As	75	He	9.652	0.83	3039	0.32	
Se	77	H2	1.733	10.29	983	0.18	
Se	78	H2	0.408	7.94	234	0.17	
Sb	121	He	0.543	2.15	1219	0.04	
Sb	123	He	0.565	1.83	1005	0.06	
[Pb]	206	He	99.048	0.84	582724	0.02	
[Pb]	207	He	96.423	1.05	505333	0.02	
Pb	208	He	97.634	0.96	2354547	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	591999	2.18	604198	97.98	30	120	
Ge	72	He	85496	0.97	81288	105.18	30	120	
Ge	72	H2	981125	1.56	933781	105.07	30	120	
In	115	He	763022	0.48	717634	106.32	30	120	
Lu	175	He	2218667	0.90	2064230	107.48	30	120	

Sample Report

Sample Table

Sample Name	K1604717-001L
Data File Name	015SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T09:45:11-07:00
Sample Type	Sample
Dilution	1
Comment	25
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	0.483	3.04	1248	0.04	
Ni	60	He	4.128	3.14	5721	0.07	
Ni	62	He	4.383	9.14	972	0.45	
Cu	63	He	8.588	0.66	34095	0.03	
Cu	65	He	8.547	0.40	17052	0.05	
Zn	66	He	25.353	4.19	12778	0.20	
As	75	He	1.959	11.30	625	0.31	
Se	77	H2	0.154	50.82	729	0.02	
Se	78	H2	0.059	10.76	41	0.14	
Sb	121	He	0.098	18.84	289	0.03	
Sb	123	He	0.104	15.00	226	0.05	
[Pb]	206	He	20.405	1.00	118465	0.02	
[Pb]	207	He	19.890	1.33	102856	0.02	
Pb	208	He	20.135	1.06	479137	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	588422	1.12	604198	97.39	30	120	
Ge	72	He	85907	0.38	81288	105.68	30	120	
Ge	72	H2	1006966	1.04	933781	107.84	30	120	
In	115	He	764719	1.02	717634	106.56	30	120	
Lu	175	He	2187884	0.74	2064230	105.99	30	120	

Post Digestion Spike Sample (PDS) Report

Sample Table

Sample Name	K1604717-001A
Data File Name	016_PDS.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T09:49:02-07:00
Sample Type	PDS
Dilution	1
Comment	5
QC Ref File Name	014_ARF.d
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Spk Amt	%Rec	QC Flag
Be	9	No Gas	53.312	0.826	136009	0.96	50	102	
Ni	60	He	68.441	0.924	93936	1.01	50	97	
Ni	62	He	69.036	2.410	15015	2.36	50	97	
Cu	63	He	90.096	0.536	360326	0.85	50	97	
Cu	65	He	90.775	0.999	182414	0.66	50	99	
Zn	66	He	170.663	1.146	86643	0.76	50	95	
As	75	He	59.168	1.608	18875	1.12	50	99	
Se	77	H2	51.689	1.505	9828	1.54	50	100	
Se	78	H2	49.293	1.560	28075	0.61	50	98	
Sb	121	He	50.040	0.972	105666	0.10	50	99	
Sb	123	He	49.707	1.321	84873	0.42	50	98	
[Pb]	206	He	149.976	0.988	883164	0.88	50	102	
[Pb]	207	He	148.049	1.355	776592	0.81	50	103	
Pb	208	He	148.393	0.573	3582136	1.19	50	102	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	588453	1.46	604198	97.39	30	120	
Ge	72	He	86787	0.51	81288	106.76	30	120	
Ge	72	H2	1004884	1.07	933781	107.61	30	120	
In	115	He	769879	0.99	717634	107.28	30	120	
Lu	175	He	2220982	1.76	2064230	107.59	30	120	

Matrix Spike Sample (MS) Report

Sample Table

Sample Name	K1604717-0015
Data File Name	017_Spk.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T09:52:51-07:00
Sample Type	Spike
Dilution	1
Comment	S
QC Ref File Name	014_ARF.d
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Spk Amt	%Rec	QC Flag
Be	9	No Gas	22.045	1.120	55354	0.58	20	99	
Ni	60	He	201.689	2.727	283517	1.22	200	91	
Ni	62	He	202.255	2.484	45035	1.23	200	91	
Cu	63	He	125.152	2.680	513029	1.11	100	84	
Cu	65	He	125.445	1.829	258414	0.28	100	84	
Zn	66	He	297.605	1.913	154860	0.53	200	87	
As	75	He	193.412	1.447	63242	0.28	200	92	
Se	77	H2	193.085	1.910	34714	0.62	200	96	
Se	78	H2	186.269	2.094	105822	0.76	200	93	
Sb	121	He	87.922	0.715	184749	0.21	200	44	Flag
Sb	123	He	87.369	1.501	148458	0.69	200	43	Flag
[Pb]	206	He	284.064	0.422	1703256	0.41	200	93	
[Pb]	207	He	280.200	1.025	1496593	0.50	200	92	
Pb	208	He	280.108	1.575	6884261	0.90	200	91	

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QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	579112	1.64	604198	95.85	30	120	
Ge	72	He	88987	1.55	81288	109.47	30	120	
Ge	72	H2	1002645	1.48	933781	107.37	30	120	
In	115	He	766353	0.82	717634	106.79	30	120	
Lu	175	He	2261366	0.73	2064230	109.55	30	120	

Matrix Spike Sample (MS) Report

Sample Table

Sample Name	K1604717-001SD
Data File Name	018_Spk.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T09:56:40-07:00
Sample Type	Spike
Dilution	1
Comment	5
QC Ref File Name	014_ARF.d
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Spk Amt	%Rec	QC Flag
Be	9	No Gas	22.841	2.484	58198	1.07	20	103	
Ni	60	He	210.288	0.565	294407	0.81	200	95	
Ni	62	He	212.632	1.256	47149	0.55	200	96	
Cu	63	He	130.944	0.591	534589	0.20	100	89	
Cu	65	He	130.454	0.970	267611	0.23	100	89	
Zn	66	He	304.972	1.021	158032	0.33	200	91	
As	75	He	201.708	1.234	65676	0.72	200	96	
Se	77	H2	200.314	2.837	36201	1.33	200	99	
Se	78	H2	193.872	0.879	110819	0.56	200	97	
Sb	121	He	92.130	1.157	195067	0.45	200	46	Flag
Sb	123	He	92.120	0.907	157735	0.17	200	46	Flag
[Pb]	206	He	290.471	0.187	1747744	1.00	200	96	
[Pb]	207	He	282.495	1.239	1514026	0.08	200	93	
Pb	208	He	284.367	1.353	7013043	0.35	200	93	

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QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	587812	2.73	604198	97.29	30	120	
Ge	72	He	88604	0.74	81288	109.00	30	120	
Ge	72	H2	1008693	1.43	933781	108.02	30	120	
In	115	He	772226	0.74	717634	107.61	30	120	
Lu	175	He	2269241	1.18	2064230	109.93	30	120	

Sample Report

Sample Table

Sample Name	K1604717-002
Data File Name	019SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T10:00:27-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	2.862	2.5S	7349	0.04	
Ni	60	He	26.217	2.28	37375	0.07	
Ni	62	He	26.259	1.48	5941	0.44	
Cu	63	He	62.634	1.47	259698	0.02	
Cu	65	He	62.916	1.98	131076	0.05	
Zn	66	He	159.606	1.53	84000	0.19	
As	75	He	13.583	1.70	4497	0.30	
Se	77	H2	2.264	9.80	1103	0.21	
Se	78	H2	0.475	17.61	279	0.17	
Sb	121	He	1.050	1.21	2343	0.04	
Sb	123	He	1.017	2.86	1819	0.06	
[Pb]	206	He	161.453	2.02	968879	0.02	
[Pb]	207	He	157.856	1.67	843862	0.02	
Pb	208	He	160.666	1.49	3952265	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	591083	1.30	604198	97.83	30	120	
Ge	72	He	89973	1.20	81288	110.68	30	120	
Ge	72	H2	1007355	1.94	933781	107.88	30	120	
In	115	He	784229	0.35	717634	109.28	30	120	
Lu	175	He	2263321	0.79	2064230	109.64	30	120	

Sample Report

Sample Table

Sample Name	K1604717-003
Data File Name	020SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T10:04:16-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	4.625	2.29	11743	0.04	
Ni	60	He	75.086	1.08	106038	0.07	
Ni	62	He	75.442	0.57	16884	0.45	
Cu	63	He	93.639	1.32	385374	0.02	
Cu	65	He	94.262	0.79	194935	0.05	
Zn	66	He	242.892	0.48	126885	0.19	
As	75	He	20.420	1.71	6709	0.30	
Se	77	H2	4.369	9.69	1485	0.29	
Se	78	H2	0.846	2.91	494	0.17	
Sb	121	He	0.641	1.87	1462	0.04	
Sb	123	He	0.642	4.45	1165	0.06	
[Pb]	206	He	94.413	1.82	579320	0.02	
[Pb]	207	He	91.605	2.01	500700	0.02	
Pb	208	He	92.928	1.87	2337320	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	585023	1.98	604198	96.83	30	120	
Ge	72	He	89316	1.30	81288	109.88	30	120	
Ge	72	H2	1013554	0.72	933781	108.54	30	120	
In	115	He	783096	0.66	717634	109.12	30	120	
Lu	175	He	2314344	1.77	2064230	112.12	30	120	

Sample Report

Sample Table

Sample Name	K1604717-004
Data File Name	021SMPL.d
Data Path Name	D:\Data\Experiments\0S2616A1.b
Acq Date Time	2016-05-26T10:08:06-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	3.978	1.32	9993	0.04	
Ni	60	He	29.825	0.68	41613	0.07	
Ni	62	He	30.087	5.12	6657	0.45	
Cu	63	He	55.614	1.16	225741	0.02	
Cu	65	He	56.153	0.96	114533	0.05	
Zn	66	He	181.934	1.10	93727	0.19	
As	75	He	18.869	2.13	6112	0.31	
Se	77	H2	3.267	4.65	1266	0.26	
Se	78	H2	0.646	10.01	372	0.17	
Sb	121	He	0.783	0.97	1730	0.05	
Sb	123	He	0.850	5.04	1495	0.06	
[Pb]	206	He	67.407	2.77	407433	0.02	
[Pb]	207	He	65.030	1.62	350208	0.02	
Pb	208	He	65.883	2.33	1632485	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	578646	1.73	604198	95.77	30	120	
Ge	72	He	88074	1.16	81288	108.35	30	120	
Ge	72	H2	995900	1.36	933781	106.65	30	120	
In	115	He	766948	0.37	717634	106.87	30	120	
Lu	175	He	2280178	2.42	2064230	110.46	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	022_CCV.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T10:11:58-07:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	25.040	0.453	63197	1.11	25	100	
Ni	60	He	24.018	2.335	33014	2.18	25	96	
Ni	62	He	24.062	3.596	5250	3.97	25	96	
Cu	63	He	24.201	1.142	96794	2.18	25	97	
Cu	65	He	24.188	0.623	48621	3.01	25	97	
Zn	66	He	23.985	2.902	12212	5.27	25	96	
As	75	He	24.680	1.618	7873	3.55	25	99	
Se	77	H2	24.747	2.031	4917	2.73	25	99	
Se	78	H2	24.220	1.813	13380	1.09	25	97	
Sb	121	He	25.177	0.765	52232	3.47	25	101	
Sb	123	He	24.945	1.924	41818	0.93	25	100	
[Pb]	206	He	24.484	0.243	141792	2.78	25	98	
[Pb]	207	He	24.820	0.213	128035	2.66	25	99	
Pb	208	He	24.537	0.292	582450	2.71	25	98	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	582022	0.81	604198	96.33	30	120	
Ge	72	He	86729	2.39	81288	106.69	30	120	
Ge	72	H2	974430	1.33	933781	104.35	30	120	
In	115	He	755638	2.83	717634	105.30	30	120	
Lu	175	He	2182851	2.87	2064230	105.75	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	023_CCB.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T10:15:46-07:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	0.002	56.5	22	11.6	0.04	
Ni	60	He	0.005	477.7	130	26.8	0.2	
Ni	62	He	0.055	80.5	43	23.1	0.2	
Cu	63	He	0.001	531.0	112	18.9	0.2	
Cu	65	He	0.009	182.8	74	46.6	0.2	
Zn	66	He	0.056	54.1	73	20.8	1	
As	75	He	-0.005	-66.8	5	20.0	0.25	
Se	77	H2	-0.114	-64.5	693	2.5	20	
Se	78	H2	0.000	-4935.0	8	45.1	0.5	
Sb	121	He	0.000	-11738.1	86	28.1	0.2	
Sb	123	He	0.016	45.9	79	17.2	0.05	
[Pb]	206	He	0.005	60.9	123	14.3	0.1	
[Pb]	207	He	0.013	11.3	144	5.3	0.1	
Pb	208	He	0.007	34.6	549	11.5	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	591923	1.87	604198	97.97	30	120	
Ge	72	He	88039	0.66	81288	108.30	30	120	
Ge	72	H2	1022877	0.90	933781	109.54	30	120	
In	115	He	787480	1.11	717634	109.73	30	120	
Lu	175	He	2254495	0.15	2064230	109.22	30	120	

Sample Report

Sample Table

Sample Name	K1604717-005
Data File Name	024SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T10:19:37-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	3.297	1.67	8553	0.04	
Ni	60	He	29.167	3.69	42384	0.07	
Ni	62	He	29.942	1.83	6903	0.43	
Cu	63	He	32.272	0.90	136511	0.02	
Cu	65	He	32.759	0.67	69631	0.05	
Zn	66	He	160.162	0.63	85964	0.19	
As	75	He	16.536	1.33	5582	0.30	
Se	77	H2	2.311	4.40	1153	0.20	
Se	78	H2	0.504	6.36	306	0.16	
Sb	121	He	0.516	6.20	1229	0.04	
Sb	123	He	0.529	3.25	997	0.05	
[Pb]	206	He	45.243	0.80	279113	0.02	
[Pb]	207	He	43.710	0.66	240214	0.02	
Pb	208	He	44.571	1.26	1127081	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	597410	1.93	604198	98.88	30	120	
Ge	72	He	91751	1.12	81288	112.87	30	120	
Ge	72	H2	1044896	1.24	933781	111.90	30	120	
In	115	He	806020	0.55	717634	112.32	30	120	
Lu	175	He	2326159	1.71	2064230	112.69	30	120	

Sample Report

Sample Table

Sample Name	K1604717-006
Data File Name	025SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T10:23:26-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	3.491	1.40	9023	0.04	
Ni	60	He	29.932	2.64	43244	0.07	
Ni	62	He	29.967	2.47	6869	0.44	
Cu	63	He	60.443	1.77	254087	0.02	
Cu	65	He	61.193	1.07	129270	0.05	
Zn	66	He	209.998	1.94	112035	0.19	
As	75	He	20.959	1.18	7032	0.30	
Se	77	H2	3.067	7.21	1286	0.24	
Se	78	H2	0.766	8.76	460	0.17	
Sb	121	He	0.889	4.08	1999	0.04	
Sb	123	He	0.849	3.04	1528	0.06	
[Pb]	206	He	90.120	1.54	544881	0.02	
[Pb]	207	He	87.408	1.88	470767	0.02	
Pb	208	He	88.748	1.48	2199510	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	595159	1.75	604198	98.50	30	120	
Ge	72	He	91226	1.67	81288	112.23	30	120	
Ge	72	H2	1040636	0.45	933781	111.44	30	120	
In	115	He	785352	0.88	717634	109.44	30	120	
Lu	175	He	2280174	0.95	2064230	110.46	30	120	

Sample Report

Sample Table

Sample Name	K1604717-007
Data File Name	026SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T10:27:16-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	3.255	4.25	8288	0.04	
Ni	60	He	29.826	2.97	41807	0.07	
Ni	62	He	30.044	2.05	6681	0.45	
Cu	63	He	47.850	1.40	195214	0.02	
Cu	65	He	47.632	2.42	97631	0.05	
Zn	66	He	168.988	2.45	87483	0.19	
As	75	He	18.250	1.78	5942	0.31	
Se	77	H2	3.036	4.31	1235	0.25	
Se	78	H2	0.732	6.95	424	0.17	
Sb	121	He	0.577	2.96	1320	0.04	
Sb	123	He	0.621	2.58	1126	0.06	
[Pb]	206	He	69.394	0.48	415303	0.02	
[Pb]	207	He	67.496	0.72	359818	0.02	
Pb	208	He	68.393	0.52	1677762	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	586499	2.56	604198	97.07	30	120	
Ge	72	He	88526	2.26	81288	108.90	30	120	
Ge	72	H2	1003425	1.96	933781	107.46	30	120	
In	115	He	780633	0.23	717634	108.78	30	120	
Lu	175	He	2256659	0.6S	2064230	109.32	30	120	

Sample Report

Sample Table

Sample Name	K1604717-008
Data File Name	027SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T10:31:05-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	2.930	2.56	7546	0.04	
Ni	60	He	11.395	6.88	16642	0.07	
Ni	62	He	10.990	6.36	2555	0.43	
Cu	63	He	13.395	6.71	56734	0.02	
Cu	65	He	13.408	6.56	28524	0.05	
Zn	66	He	265.622	6.97	142500	0.19	
As	75	He	12.163	6.51	4107	0.30	
Se	77	H2	2.823	4.13	1218	0.23	
Se	78	H2	0.440	7.50	263	0.17	
Sb	121	He	0.492	3.97	1147	0.04	
Sb	123	He	0.503	5.10	926	0.05	
[Pb]	206	He	37.102	1.38	227251	0.02	
[Pb]	207	He	36.149	1.29	197268	0.02	
Pb	208	He	36.752	1.14	922868	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	592875	2.06	604198	98.13	30	120	
Ge	72	He	91799	3.94	81288	112.93	30	120	
Ge	72	H2	1020422	0.82	933781	109.28	30	120	
In	115	He	785137	4.79	717634	109.41	30	120	
Lu	175	He	2309640	6.08	2064230	111.89	30	120	

Sample Report

Sample Table

Sample Name	K1604717-009
Data File Name	028SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T10:34:53-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	3.246	2.69	8172	0.04	
Ni	60	He	12.159	2.10	17205	0.07	
Ni	62	He	12.360	5.55	2780	0.44	
Cu	63	He	15.072	1.64	61872	0.02	
Cu	65	He	15.173	1.58	31297	0.05	
Zn	66	He	221.743	2.33	115361	0.19	
As	75	He	14.013	1.64	4587	0.31	
Se	77	H2	4.251	18.58	1177	0.36	
Se	78	H2	0.550	9.70	261	0.21	
Sb	121	He	0.328	2.13	785	0.04	
Sb	123	He	0.335	1.94	627	0.05	
[Pb]	206	He	34.619	1.77	207921	0.02	
[Pb]	207	He	33.035	1.40	176740	0.02	
Pb	208	He	33.933	1.48	835380	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	579750	1.59	604198	95.95	30	120	
Ge	72	He	88958	1.31	81288	109.44	30	120	
Ge	72	H2	820030	10.23	933781	87.82	30	120	
In	115	He	777523	0.46	717634	108.35	30	120	
Lu	175	He	2264490	1.61	2064230	109.70	30	120	

Sample Report

Sample Table

Sample Name	K1604717-010
Data File Name	029SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T10:38:42-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	3.061	1.22	7700	0.04	
Ni	60	He	28.190	2.13	40437	0.07	
Ni	62	He	27.495	0.52	6258	0.44	
Cu	63	He	68.134	1.79	284267	0.02	
Cu	65	He	68.589	1.99	143789	0.05	
Zn	66	He	194.794	2.26	103149	0.19	
As	75	He	26.130	2.05	8699	0.30	
Se	77	H2	3.428	6.32	1334	0.26	
Se	78	H2	0.667	10.39	396	0.17	
Sb	121	He	0.938	4.35	2091	0.04	
Sb	123	He	0.877	3.36	1566	0.06	
[Pb]	206	He	103.608	0.29	628781	0.02	
[Pb]	207	He	99.793	1.02	539453	0.02	
Pb	208	He	101.545	0.74	2525994	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	579079	1.69	604198	95.84	30	120	
Ge	72	He	90537	0.99	81288	111.38	30	120	
Ge	72	H2	1026266	1.51	933781	109.90	30	120	
In	115	He	779965	0.84	717634	108.69	30	120	
Lu	175	He	2288630	1.61	2064230	110.87	30	120	

Sample Report

Sample Table

Sample Name	K1604717-011
Data File Name	030SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T10:42:31-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	3.955	1.02	10333	0.04	
Ni	60	He	36.597	0.86	54025	0.07	
Ni	62	He	36.006	2.55	8429	0.43	
Cu	63	He	53.851	0.17	231435	0.02	
Cu	65	He	54.683	0.18	118088	0.05	
Zn	66	He	224.813	1.49	122604	0.18	
As	75	He	35.967	1.55	12330	0.29	
Se	77	H2	2.619	1.54	1221	0.21	
Se	78	H2	0.588	5.13	360	0.16	
Sb	121	He	0.946	1.87	2183	0.04	
Sb	123	He	0.933	0.40	1723	0.05	
[Pb]	206	He	90.476	1.56	557716	0.02	
[Pb]	207	He	85.306	1.85	468411	0.02	
Pb	208	He	88.046	1.45	2224753	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	601585	1.66	604198	99.57	30	120	
Ge	72	He	93243	0.73	81288	114.71	30	120	
Ge	72	H2	1054766	1.19	933781	112.96	30	120	
In	115	He	808021	0.27	717634	112.60	30	120	
Lu	175	He	2324830	1.46	2064230	112.62	30	120	

Sample Report

Sample Table

Sample Name	K1604717-012
Data File Name	031SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T10:46:20-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	1.730	4.09	4306	0.04	
Ni	60	He	16.847	16.08	20869	0.08	
Ni	62	He	16.806	11.78	3320	0.51	
Cu	63	He	27.135	16.89	97549	0.03	
Cu	65	He	27.159	16.17	49094	0.06	
Zn	66	He	77.103	15.99	35216	0.22	
As	75	He	13.625	14.34	3918	0.35	
Se	77	H2	3.846	7.21	1359	0.28	
Se	78	H2	0.437	3.71	253	0.17	
Sb	121	He	0.341	8.85	721	0.05	
Sb	123	He	0.388	23.52	628	0.06	
[Pb]	206	He	34.445	13.91	185923	0.02	
[Pb]	207	He	33.360	14.54	160315	0.02	
Pb	208	He	33.804	14.47	747578	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	572036	1.82	604198	94.68	30	120	
Ge	72	He	79169	13.60	81288	97.39	30	120	
Ge	72	H2	990513	1.83	933781	106.08	30	120	
In	115	He	695276	14.83	717634	96.88	30	120	
Lu	175	He	2059003	12.68	2064230	99.75	30	120	

Sample Report

Sample Table

Sample Name	K1604717-013
Data File Name	032SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T10:50:10-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	1.984	2.57	4983	0.04	
Ni	60	He	20.047	1.69	28008	0.07	
Ni	62	He	20.860	1.71	4626	0.45	
Cu	63	He	34.765	1.69	141156	0.02	
Cu	65	He	35.016	1.52	71439	0.05	
Zn	66	He	89.063	1.18	45908	0.19	
As	75	He	20.103	2.17	6512	0.31	
Se	77	H2	3.716	12.41	1356	0.27	
Se	78	H2	0.441	7.81	259	0.17	
Sb	121	He	1.033	5.12	2253	0.05	
Sb	123	He	1.003	3.40	1752	0.06	
[Pb]	206	He	91.162	0.48	555556	0.02	
[Pb]	207	He	86.574	0.81	469969	0.02	
Pb	208	He	88.268	0.75	2204919	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	577565	2.44	604198	9S.59	30	120	
Ge	72	He	88077	1.23	81288	108.35	30	120	
Ge	72	H2	1003837	1.19	933781	107.50	30	120	
In	115	He	766041	0.45	717634	106.75	30	120	
Lu	175	He	2298107	1.20	2064230	111.33	30	120	

Sample Report

Sample Table

Sample Name	K1604717-014
Data File Name	033SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T10:54:00-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	2.214	2.51	5709	0.04	
Ni	60	He	19.909	1.18	28246	0.07	
Ni	62	He	19.884	0.73	4480	0.44	
Cu	63	He	30.946	0.50	127617	0.02	
Cu	65	He	31.012	1.41	64260	0.05	
Zn	66	He	115.579	0.98	60485	0.19	
As	75	He	14.979	1.41	4929	0.30	
Se	77	H2	2.764	4.82	1201	0.23	
Se	78	H2	0.341	11.29	204	0.17	
Sb	121	He	0.554	7.33	1277	0.04	
Sb	123	He	0.543	5.08	995	0.05	
[Pb]	206	He	53.441	1.49	329297	0.02	
[Pb]	207	He	51.531	0.78	282863	0.02	
Pb	208	He	52.483	1.29	1325660	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	593200	1.62	604198	98.18	30	120	
Ge	72	He	89438	0.68	81288	110.03	30	120	
Ge	72	H2	1015417	1.39	933781	108.74	30	120	
In	115	He	784512	0.55	717634	109.32	30	120	
Lu	175	He	2323507	0.76	2064230	112.56	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	034_CCV.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T10:57:50-07:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	24.868	2.596	62667	0.64	25	99	
Ni	60	He	25.452	2.314	35768	0.53	25	102	
Ni	62	He	25.362	4.229	5654	1.85	25	101	
Cu	63	He	25.280	2.475	103370	0.48	25	101	
Cu	65	He	25.534	2.586	52464	0.62	25	102	
Zn	66	He	25.908	5.238	13471	3.00	25	104	
As	75	He	25.897	2.646	8445	1.88	25	104	
Se	77	H2	25.345	2.606	5341	3.13	25	101	
Se	78	H2	25.111	1.553	14759	0.50	25	100	
Sb	121	He	25.576	3.110	55849	0.44	25	102	
Sb	123	He	25.542	2.272	45098	0.82	25	102	
[Pb]	206	He	24.630	4.166	149733	0.47	25	99	
[Pb]	207	He	24.888	4.912	134744	1.10	25	100	
Pb	208	He	24.846	4.369	619086	0.58	25	99	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	581387	2.56	604198	96.22	30	120	
Ge	72	He	88702	2.43	81288	109.12	30	120	
Ge	72	H2	1036712	1.17	933781	111.02	30	120	
In	115	He	795966	3.04	717634	110.92	30	120	
Lu	175	He	2294106	4.36	2064230	111.14	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	035_CCB.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T11:01:39-07:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	0.003	27.9	25	8.4	0.04	
Ni	60	He	0.015	104.9	144	14.8	0.2	
Ni	62	He	0.039	166.7	40	36.3	0.2	
Cu	63	He	0.007	142.5	137	29.6	0.2	
Cu	65	He	0.008	118.9	71	25.8	0.2	
Zn	66	He	0.054	31.9	72	11.6	1	
As	75	He	-0.002	-838.6	6	72.6	0.25	
Se	77	H2	-0.201	-100.6	677	5.0	20	
Se	78	H2	0.004	165.3	10	36.6	0.5	
Sb	121	He	0.004	102.4	97	9.6	0.2	
Sb	123	He	0.016	26.7	81	9.3	0.05	
[Pb]	206	He	0.007	100.2	141	31.2	0.1	
[Pb]	207	He	0.008	119.7	121	40.6	0.1	
Pb	208	He	0.008	44.6	572	15.0	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	599656	1.32	604198	99.25	30	120	
Ge	72	He	88259	1.17	81288	108.58	30	120	
Ge	72	H2	1022494	0.52	933781	109.50	30	120	
In	115	He	799974	0.33	717634	111.47	30	120	
Lu	175	He	2308434	0.69	2064230	111.83	30	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLCCVS
Data File Name	036LCCV.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T11:05:30-07:00
Sample Type	LLCCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	0.042	14.666	125	13.67	0.04	105	
Ni	60	He	0.403	17.132	682	13.49	0.4	101	
Ni	62	He	0.499	25.637	141	20.64	0.4	125	
Cu	63	He	0.201	5.291	922	4.11	0.2	100	
Cu	65	He	0.229	7.947	521	6.57	0.2	114	
Zn	66	He	1.079	11.215	600	10.93	1	108	
As	75	He	0.990	2.241	327	2.84	1	99	
Se	77	H2	1.935	7.205	1059	0.41	2	97	
Se	78	H2	1.955	2.290	1139	0.77	2	98	
Sb	121	He	0.106	16.772	315	12.60	0.1	106	
Sb	123	He	0.120	5.730	261	4.26	0.1	120	
[Pb]	206	He	0.099	0.852	690	0.48	0.1	99	
[Pb]	207	He	0.100	16.950	616	15.17	0.1	100	
Pb	208	He	0.102	3.674	2876	2.48	0.1	102	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	594707	2.34	604198	98.43	30	120	
Ge	72	He	87994	0.64	81288	108.25	30	120	
Ge	72	H2	1021267	2.05	933781	109.37	30	120	
In	115	He	786852	0.59	717634	109.65	30	120	
Lu	175	He	2270542	1.04	2064230	109.99	30	120	

Sample Report

Sample Table

Sample Name	K1604717-015
Data File Name	037SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T11:09:21-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	1.925	2.60	4849	0.04	
Ni	60	He	27.401	2.72	38169	0.07	
Ni	62	He	27.981	3.94	6184	0.45	
Cu	63	He	61.437	2.09	248925	0.02	
Cu	65	He	62.224	1.92	126685	0.05	
Zn	66	He	201.490	1.95	103617	0.19	
As	75	He	27.772	1.10	8979	0.31	
Se	77	H2	1.294	7.11	933	0.14	
Se	78	H2	0.377	6.28	224	0.17	
Sb	121	He	3.118	1.88	6687	0.05	
Sb	123	He	3.115	3.42	5385	0.06	
[Pb]	206	He	152.255	1.47	922413	0.02	
[Pb]	207	He	147.991	2.41	798588	0.02	
Pb	208	He	151.624	2.26	3765101	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	579209	1.12	604198	95.86	30	120	
Ge	72	He	87932	1.73	81288	108.17	30	120	
Ge	72	H2	1009176	1.71	933781	108.07	30	120	
In	115	He	772725	0.81	717634	107.68	30	120	
Lu	175	He	2285146	1.90	2064230	110.70	30	120	

Sample Report

Sample Table

Sample Name	K1604717-016
Data File Name	038SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T11:13:14-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	2.154	2.66	5387	0.04	
Ni	60	He	67.104	2.78	91587	0.07	
Ni	62	He	69.230	3.11	14973	0.46	
Cu	63	He	44.650	2.15	177641	0.03	
Cu	65	He	44.817	3.20	89581	0.05	
Zn	66	He	237.831	2.25	120063	0.20	
As	75	He	16.824	2.81	5342	0.31	
Se	77	H2	1.641	8.37	960	0.17	
Se	78	H2	0.310	8.09	179	0.17	
Sb	121	He	1.814	1.57	3857	0.05	
Sb	123	He	1.866	1.24	3188	0.06	
[Pb]	206	He	42.499	0.99	251381	0.02	
[Pb]	207	He	40.546	1.11	213633	0.02	
Pb	208	He	41.734	0.71	1011890	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	575140	0.55	604198	95.19	30	120	
Ge	72	He	86341	2.60	81288	106.22	30	120	
Ge	72	H2	973837	1.47	933781	104.29	30	120	
In	115	He	758965	1.09	717634	105.76	30	120	
Lu	175	He	2230116	0.82	2064230	108.04	30	120	

Sample Report

Sample Table

Sample Name	K1604717-017
Data File Name	039SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T11:17:04-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	1.792	1.95	4686	0.04	
Ni	60	He	51.997	1.22	73729	0.07	
Ni	62	He	51.949	2.79	11676	0.44	
Cu	63	He	37.782	1.07	156104	0.02	
Cu	65	He	37.579	0.86	78020	0.05	
Zn	66	He	214.663	1.43	112533	0.19	
As	75	He	15.402	2.32	5079	0.30	
Se	77	H2	1.325	16.76	951	0.14	
Se	78	H2	0.252	1.79	154	0.16	
Sb	121	He	0.331	4.62	809	0.04	
Sb	123	He	0.366	5.56	698	0.05	
[Pb]	206	He	50.731	2.04	313456	0.02	
[Pb]	207	He	49.734	2.73	273715	0.02	
Pb	208	He	50.468	2.47	1278144	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	600982	0.87	604198	99.47	30	120	
Ge	72	He	89625	0.45	81288	110.26	30	120	
Ge	72	H2	1022980	1.13	933781	109.55	30	120	
In	115	He	796572	0.55	717634	111.00	30	120	
Lu	175	He	2330342	2.18	2064230	112.89	30	120	

Sample Report

Sample Table

Sample Name	K1604717-018
Data File Name	040SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T11:20:54-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	2.410	3.11	6218	0.04	
Ni	60	He	59.734	0.61	85135	0.07	
Ni	62	He	60.162	2.25	13589	0.44	
Cu	63	He	44.557	1.08	185057	0.02	
Cu	65	He	44.513	1.52	92897	0.05	
Zn	66	He	247.553	1.52	130457	0.19	
As	75	He	18.734	0.23	6209	0.30	
Se	77	H2	1.875	11.17	1056	0.18	
Se	78	H2	0.351	10.55	213	0.16	
Sb	121	He	0.435	4.36	1044	0.04	
Sb	123	He	0.455	6.65	859	0.05	
[Pb]	206	He	67.561	2.02	420307	0.02	
[Pb]	207	He	65.905	1.40	365256	0.02	
Pb	208	He	66.872	1.38	1705412	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	593796	1.31	604198	98.28	30	120	
Ge	72	He	90107	1.22	81288	110.85	30	120	
Ge	72	H2	1028218	1.72	933781	110.11	30	120	
In	115	He	802032	0.85	717634	111.76	30	120	
Lu	175	He	2346160	1.24	2064230	113.66	30	120	

Sample Report

Sample Table

Sample Name	K1604717-019
Data File Name	041SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T11:24:44-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	1.761	1.98	4573	0.04	
Ni	60	He	67.422	3.41	95946	0.07	
Ni	62	He	67.903	1.60	15318	0.44	
Cu	63	He	48.154	2.06	199767	0.02	
Cu	65	He	49.047	2.70	102230	0.05	
Zn	66	He	265.214	2.19	139611	0.19	
As	75	He	19.326	3.47	6397	0.30	
Se	77	H2	1.591	26.48	1002	0.16	
Se	78	H2	0.325	10.72	197	0.17	
Sb	121	He	0.621	3.28	1438	0.04	
Sb	123	He	0.616	6.22	1133	0.05	
[Pb]	206	He	67.183	0.25	415095	0.02	
[Pb]	207	He	67.744	0.75	372842	0.02	
Pb	208	He	67.641	0.63	1713089	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	596961	1.78	604198	98.80	30	120	
Ge	72	He	90030	2.39	81288	110.76	30	120	
Ge	72	H2	1024980	0.94	933781	109.77	30	120	
In	115	He	793181	0.69	717634	110.53	30	120	
Lu	175	He	2329767	0.56	2064230	112.86	30	120	

Sample Report

Sample Table

Sample Name	K1604717-020
Data File Name	042SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T11:28:34-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	2.098	1.29	5249	0.04	
Ni	60	He	23.899	1.29	32859	0.07	
Ni	62	He	23.920	1.40	5220	0.46	
Cu	63	He	47.620	1.86	190359	0.03	
Cu	65	He	48.217	2.14	96850	0.05	
Zn	66	He	95.511	1.70	48479	0.20	
As	75	He	20.542	1.03	6553	0.31	
Se	77	H2	3.602	3.76	1307	0.28	
Se	78	H2	0.461	5.75	264	0.17	
Sb	121	He	1.022	2.36	2268	0.05	
Sb	123	He	1.057	3.24	1875	0.06	
[Pb]	206	He	102.413	1.27	625731	0.02	
[Pb]	207	He	98.035	1.37	533571	0.02	
Pb	208	He	99.548	1.32	2493164	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	575278	1.23	604198	95.21	30	120	
Ge	72	He	86730	0.76	81288	106.70	30	120	
Ge	72	H2	982755	1.53	933781	105.24	30	120	
In	115	He	778879	0.10	717634	108.53	30	120	
Lu	175	He	2304033	0.53	2064230	111.62	30	120	

Prep Blank (PB) Report

Sample Table

Sample Name	KQ1605151-01
Data File Name	043_PB.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T11:32:23-07:00
Sample Type	PB
Dilution	1
Comment	5
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	-0.001	-314.1	16	35.2	0.04	
Ni	60	He	0.043	25.5	191	8.1	0.2	
Ni	62	He	0.002	2358.0	33	40.0	0.2	
Cu	63	He	0.052	12.8	333	7.9	0.2	
Cu	65	He	0.038	18.9	139	11.8	0.2	
Zn	66	He	0.250	21.4	181	14.9	1	
As	75	He	-0.006	-100.4	5	44.6	0.25	
Se	77	H2	0.089	219.7	747	7.4	2	
Se	78	H2	-0.007	-85.6	4	81.0	0.5	
Sb	121	He	-0.020	-13.8	44	15.2	0.1	
Sb	123	He	-0.012	-60.0	31	43.0	0.05	
[Pb]	206	He	0.028	9.3	274	5.1	0.1	
[Pb]	207	He	0.033	11.1	268	7.6	0.1	
Pb	208	He	0.027	6.8	1094	3.7	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	622420	1.49	604198	103.02	30	120	
Ge	72	He	92227	0.99	81288	113.46	30	120	
Ge	72	H2	1047095	2.53	933781	112.13	30	120	
In	115	He	821604	0.93	717634	114.49	30	120	
Lu	175	He	2375372	1.02	2064230	115.07	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	KQ1605151-02
Data File Name	044_LCS.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T11:36:13-07:00
Sample Type	LCS
Dilution	1
Comment	20
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	4.957	2.481	13879	1.36	5	99.1	
Ni	60	He	49.462	0.450	72950	1.07	50	98.9	
Ni	62	He	50.012	2.454	11693	2.82	50	100.0	
Cu	63	He	24.919	0.646	107118	0.33	25	99.7	
Cu	65	He	25.032	1.016	54069	0.42	25	100.1	
Zn	66	He	50.279	0.814	27449	0.49	50	100.6	
As	75	He	50.593	0.475	17335	0.34	50	101.2	
Se	77	H2	51.765	2.753	10165	0.83	50	103.5	
Se	78	H2	50.780	3.157	29873	0.97	50	101.6	
Sb	121	He	49.577	0.677	115326	1.05	50	99.2	
Sb	123	He	49.846	1.228	93756	0.72	50	99.7	
[Pb]	206	He	46.862	0.885	299687	0.78	50	93.7	
[Pb]	207	He	48.757	1.102	277742	0.55	50	97.5	
Pb	208	He	47.717	0.661	1250842	0.43	50	95.4	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	645109	1.45	604198	106.77	30	120	
Ge	72	He	93211	0.62	81288	114.67	30	120	
Ge	72	H2	1038295	2.25	933781	111.19	30	120	
In	115	He	848051	0.65	717634	118.17	30	120	
Lu	175	He	2411196	0.74	2064230	116.81	30	120	

All Reference Sample Report

Sample Table

Sample Name	K1604717-021
Data File Name	045_ARF.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T11:40:01-07:00
Sample Type	AllRef
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	2.471	1.79	6448	0.04	
Ni	60	He	32.141	2.47	44455	0.07	
Ni	62	He	31.497	3.24	6910	0.46	
Cu	63	He	31.187	1.96	125582	0.02	
Cu	65	He	31.329	1.53	63391	0.05	
Zn	66	He	176.581	1.55	90213	0.20	
As	75	He	13.499	4.08	4338	0.31	
Se	77	H2	2.394	11.04	1098	0.22	
Se	78	H2	0.372	6.87	215	0.17	
Sb	121	He	0.354	6.73	813	0.04	
Sb	123	He	0.347	5.83	629	0.06	
[Pb]	206	He	38.450	1.83	226935	0.02	
[Pb]	207	He	37.209	1.80	195635	0.02	
Pb	208	He	37.900	1.74	916941	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	600513	1.76	604198	99.39	30	120	
Ge	72	He	87339	0.70	81288	107.44	30	120	
Ge	72	H2	981977	1.11	933781	105.16	30	120	
In	115	He	754042	1.14	717634	105.07	30	120	
Lu	175	He	2225464	1.32	2064230	107.81	30	120	

Sample Report

Sample Table

Sample Name	K1604717-021L
Data File Name	046SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T11:43:51-07:00
Sample Type	Sample
Dilution	1
Comment	25
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	0.502	2.44	1318	0.04	
Ni	60	He	6.574	1.83	9598	0.07	
Ni	62	He	6.448	2.75	1503	0.43	
Cu	63	He	6.564	1.35	27696	0.02	
Cu	65	He	6.741	3.86	14292	0.05	
Zn	66	He	35.117	2.17	18777	0.19	
As	75	He	2.644	4.53	893	0.30	
Se	77	H2	0.552	57.51	834	0.07	
Se	78	H2	0.067	15.64	48	0.14	
Sb	121	He	0.052	12.10	200	0.03	
Sb	123	He	0.075	13.96	182	0.04	
[Pb]	206	He	7.647	0.43	47564	0.02	
[Pb]	207	He	7.328	2.48	40585	0.02	
Pb	208	He	7.495	2.32	191034	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	598290	1.27	604198	99.02	30	120	
Ge	72	He	91222	0.22	81288	112.22	30	120	
Ge	72	H2	1051078	1.03	933781	112.56	30	120	
In	115	He	791270	0.48	717634	110.26	30	120	
Lu	175	He	2341182	2.32	2064230	113.42	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	047_CCV.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T11:47:42-07:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	25.099	1.942	64829	1.31	25	100	
Ni	60	He	24.735	1.688	35191	1.72	25	99	
Ni	62	He	24.134	3.269	5450	3.34	25	97	
Cu	63	He	24.475	1.125	101310	0.35	25	98	
Cu	65	He	24.803	1.121	51590	0.40	25	99	
Zn	66	He	24.786	1.555	13053	0.70	25	99	
As	75	He	24.974	2.140	8243	1.48	25	100	
Se	77	H2	25.318	4.074	5326	3.25	25	101	
Se	78	H2	24.718	1.978	14503	1.73	25	99	
Sb	121	He	25.203	0.951	54780	0.33	25	101	
Sb	123	He	25.304	0.389	44464	0.74	25	101	
[Pb]	206	He	24.311	1.113	148220	0.62	25	97	
[Pb]	207	He	24.168	1.693	131246	0.75	25	97	
Pb	208	He	24.240	1.804	605741	0.64	25	97	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	595702	0.63	604198	98.59	30	120	
Ge	72	He	89761	0.86	81288	110.42	30	120	
Ge	72	H2	1034925	1.37	933781	110.83	30	120	
In	115	He	791814	0.62	717634	110.34	30	120	
Lu	175	He	2298171	1.39	2064230	111.33	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	048_CCB.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T11:52:01-07:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	0.003	65.4	2S	24.1	0.04	
Ni	60	He	0.015	94.2	144	10.9	0.2	
Ni	62	He	-0.037	-140.7	23	49.5	0.2	
Cu	63	He	0.009	31.4	146	10.3	0.2	
Cu	65	He	0.009	73.7	76	20.8	0.2	
Zn	66	He	0.018	230.2	54	39.4	1	
As	75	He	0.001	1275.0	7	71.4	0.25	
Se	77	H2	-0.122	-42.8	693	2.3	20	
Se	78	H2	-0.004	-141.5	6	50.0	0.5	
Sb	121	He	0.000	-1018.5	86	9.9	0.2	
Sb	123	He	0.008	38.2	64	8.3	0.05	
[Pb]	206	He	0.003	67.4	116	9.3	0.1	
[Pb]	207	He	0.008	58.4	126	22.6	0.1	
Pb	208	He	0.005	16.6	513	5.5	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	594840	2.16	604198	98.45	30	120	
Ge	72	He	89200	2.65	81288	109.73	30	120	
Ge	72	H2	1025430	1.04	933781	109.81	30	120	
In	115	He	791589	0.45	717634	110.31	30	120	
Lu	175	He	2319253	2.08	2064230	112.35	30	120	

Sample Report

Sample Table

Sample Name	LRSTD
Data File Name	049SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T11:57:14-07:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	498.800	1.17	1295232	0.04	
Ni	60	He	495.637	1.34	691761	0.07	
Ni	62	He	500.248	0.86	110577	0.45	
Cu	63	He	512.828	1.53	2087409	0.02	
Cu	65	He	497.710	1.91	1017964	0.05	
Zn	66	He	491.140	1.48	253762	0.19	
As	75	He	490.006	1.04	159095	0.31	
Se	77	H2	492.232	2.80	87589	0.56	
Se	78	H2	479.976	2.36	273245	0.18	
Sb	121	He	484.993	0.23	1050736	0.05	
Sb	123	He	479.926	0.71	840932	0.06	
[Pb]	206	He	509.095	0.79	3104736	0.02	
[Pb]	207	He	495.843	0.67	2693634	0.02	
Pb	208	He	490.701	0.80	12266557	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	598948	1.09	604198	99.13	30	120	
Ge	72	He	88359	1.03	81288	108.70	30	120	
Ge	72	H2	1005024	2.94	933781	107.63	30	120	
In	115	He	790407	0.09	717634	110.14	30	120	
Lu	175	He	2300021	0.60	2064230	111.42	30	120	

Post Digestion Spike Sample (PDS) Report

Sample Table

Sample Name	K1604717-021A
Data File Name	050_PDS.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T12:00:58-07:00
Sample Type	PDS
Dilution	1
Comment	5
QC Ref File Name	045_ARF.d
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Spk Amt	%Rec	QC Flag
Be	9	No Gas	54.857	1.218	138772	0.73	50	105	
Ni	60	He	78.598	0.918	111563	0.58	50	93	
Ni	62	He	79.002	0.404	17770	1.36	50	95	
Cu	63	He	77.378	0.958	320101	0.38	50	92	
Cu	65	He	78.016	1.094	162173	1.05	50	93	
Zn	66	He	219.465	1.805	115228	0.95	50	86	
As	75	He	61.920	1.537	20431	0.50	50	97	
Se	77	H2	51.483	0.639	9870	0.82	50	98	
Se	78	H2	49.276	1.745	28290	0.85	50	98	
Sb	121	He	50.721	0.711	108187	0.25	50	101	
Sb	123	He	50.653	1.506	87365	1.48	50	101	
[Pb]	206	He	83.922	1.338	509816	0.37	50	91	
[Pb]	207	He	82.964	1.022	448968	0.27	50	92	
Pb	208	He	83.673	1.061	2083623	0.27	50	92	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	583487	0.61	604198	96.57	30	120	
Ge	72	He	89772	1.11	81288	110.44	30	120	
Ge	72	H2	1012968	1.40	933781	108.48	30	120	
In	115	He	777643	0.53	717634	108.36	30	120	
Lu	175	He	2291017	1.29	2064230	110.99	30	120	

Matrix Spike Sample (MS) Report

Sample Table

Sample Name	K1604717-021S
Data File Name	051_Spk.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T12:04:47-07:00
Sample Type	Spike
Dilution	1
Comment	5
QC Ref File Name	045_ARF.d
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Spk Amt	%Rec	QC Flag
Be	9	No Gas	23.392	1.373	58644	1.71	20	105	
Ni	60	He	222.392	0.096	318157	0.53	200	95	
Ni	62	He	221.663	0.838	50226	0.28	200	95	
Cu	63	He	125.116	0.333	521982	0.42	100	94	
Cu	65	He	126.192	1.127	264533	0.68	100	95	
Zn	66	He	387.492	0.358	205181	0.53	200	105	
As	75	He	205.093	0.993	68240	0.39	200	96	
Se	77	H2	190.984	0.554	35263	0.63	200	94	
Se	78	H2	185.351	1.281	108115	0.25	200	92	
Sb	121	He	89.373	0.720	191794	0.58	200	45	Flag
Sb	123	He	88.866	0.499	154223	0.32	200	44	Flag
[Pb]	206	He	218.849	1.994	1354096	0.22	200	90	
[Pb]	207	He	224.780	1.331	1239021	0.58	200	94	
Pb	208	He	223.491	1.267	5668881	0.83	200	93	

PDS OK

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	578127	0.88	604198	95.69	30	120	
Ge	72	He	90541	0.63	81288	111.38	30	120	
Ge	72	H2	1029341	1.17	933781	110.23	30	120	
In	115	He	782645	0.22	717634	109.06	30	120	
Lu	175	He	2334027	1.91	2064230	113.07	30	120	

Matrix Spike Sample (MS) Report

Sample Table

Sample Name	K1604717-1SD
Data File Name	052_Spk.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T12:08:35-07:00
Sample Type	Spike
Dilution	1
Comment	5
QC Ref File Name	045_ARF.d
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Spk Amt	%Rec	QC Flag
Be	9	No Gas	23.551	1.452	59269	0.13	20	105	
Ni	60	He	223.787	0.361	320422	0.97	200	96	
Ni	62	He	226.697	1.527	51407	0.97	200	98	
Cu	63	He	125.044	0.583	522108	0.16	100	94	
Cu	65	He	126.145	0.936	264656	0.66	100	95	
Zn	66	He	374.059	0.914	198228	0.42	200	99	
As	75	He	209.607	0.590	69801	0.18	200	98	
Se	77	H2	199.520	2.225	36349	0.82	200	99	
Se	78	H2	193.402	2.497	111406	0.66	200	97	
Sb	121	He	96.210	1.119	203347	1.33	200	48	Flag
Sb	123	He	95.551	0.953	163315	0.70	200	48	Flag
[Pb]	206	He	226.835	0.776	1379062	0.46	200	94	
[Pb]	207	He	234.449	0.777	1269711	0.55	200	99	
Pb	208	He	232.231	0.532	5787545	0.77	200	97	

pds
clc

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	580458	1.59	604198	96.07	30	120	
Ge	72	He	90617	0.67	81288	111.48	30	120	
Ge	72	H2	1016835	2.53	933781	108.89	30	120	
In	115	He	770830	0.34	717634	107.41	30	120	
Lu	175	He	2292945	1.20	2064230	111.08	30	120	

Sample Report

Sample Table

Sample Name	K1604717-022
Data File Name	053SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T12:12:24-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	2.754	1.63	7131	0.04	
Ni	60	He	21.412	0.81	29769	0.07	
Ni	62	He	20.776	0.52	4586	0.45	
Cu	63	He	56.766	1.29	229354	0.02	
Cu	65	He	57.031	1.29	115784	0.05	
Zn	66	He	156.574	1.68	80297	0.19	
As	75	He	14.484	1.34	4672	0.31	
Se	77	H2	2.453	15.30	1123	0.22	
Se	78	H2	0.616	3.57	355	0.17	
Sb	121	He	0.674	2.01	1492	0.05	
Sb	123	He	0.696	4.33	1226	0.06	
[Pb]	206	He	84.322	0.38	505193	0.02	
[Pb]	207	He	81.902	0.47	437088	0.02	
Pb	208	He	83.109	0.54	2040997	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	596013	0.48	604198	98.65	30	120	
Ge	72	He	87662	0.22	81288	107.84	30	120	
Ge	72	H2	995509	1.11	933781	106.61	30	120	
In	115	He	762385	0.70	717634	106.24	30	120	
Lu	175	He	2259181	1.05	2064230	109.44	30	120	

Sample Report

Sample Table

Sample Name	K1604717-023
Data File Name	054SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T12:16:13-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	2.097	4.01	5364	0.04	
Ni	60	He	17.738	0.73	25309	0.07	
Ni	62	He	17.163	1.78	3890	0.44	
Cu	63	He	22.993	1.93	95306	0.02	
Cu	65	He	22.789	2.36	47463	0.05	
Zn	66	He	90.473	1.98	47586	0.19	
As	75	He	9.488	2.56	3140	0.30	
Se	77	H2	1.961	7.98	1054	0.19	
Se	78	H2	0.315	20.62	188	0.17	
Sb	121	He	0.311	4.83	753	0.04	
Sb	123	He	0.361	5.45	676	0.05	
[Pb]	206	He	30.078	1.27	188607	0.02	
[Pb]	207	He	28.807	1.48	160908	0.02	
Pb	208	He	29.560	2.04	759733	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	588675	2.51	604198	97.43	30	120	
Ge	72	He	89884	1.32	81288	110.58	30	120	
Ge	72	H2	1012227	2.38	933781	108.40	30	120	
In	115	He	782203	0.90	717634	109.00	30	120	
Lu	175	He	2364164	1.85	2064230	114.53	30	120	

Sample Report

Sample Table

Sample Name	K1604717-024
Data File Name	0S5SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T12:20:03-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	2.544	1.14	6545	0.04	
Ni	60	He	11.860	0.97	16987	0.07	
Ni	62	He	11.414	2.04	2601	0.44	
Cu	63	He	14.233	2.01	59123	0.02	
Cu	65	He	14.108	1.85	29454	0.05	
Zn	66	He	102.609	0.99	54047	0.19	
As	75	He	9.913	2.71	3285	0.30	
Se	77	H2	2.335	14.29	1129	0.21	
Se	78	H2	0.264	7.62	161	0.16	
Sb	121	He	0.238	14.62	600	0.04	
Sb	123	He	0.240	13.68	469	0.05	
[Pb]	206	He	21.805	2.08	134895	0.02	
[Pb]	207	He	20.602	1.95	113538	0.02	
Pb	208	He	21.273	2.11	539443	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	591847	1.03	604198	97.96	30	120	
Ge	72	He	90015	1.03	81288	110.74	30	120	
Ge	72	H2	1020163	2.75	933781	109.25	30	120	
In	115	He	785748	0.62	717634	109.49	30	120	
Lu	175	He	2332164	1.94	2064230	112.98	30	120	

Sample Report

Sample Table

Sample Name	K1604717-025
Data File Name	056SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T12:23:54-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	2.744	0.86	6990	0.04	
Ni	60	He	23.176	2.30	33002	0.07	
Ni	62	He	23.666	2.27	5349	0.44	
Cu	63	He	24.796	0.49	102712	0.02	
Cu	65	He	25.116	0.88	52276	0.05	
Zn	66	He	125.387	1.74	65893	0.19	
As	75	He	11.341	1.96	3750	0.30	
Se	77	H2	2.469	6.12	1152	0.21	
Se	78	H2	0.306	12.70	185	0.17	
Sb	121	He	0.338	1.90	812	0.04	
Sb	123	He	0.349	6.69	656	0.05	
[Pb]	206	He	32.007	1.78	199739	0.02	
[Pb]	207	He	31.015	2.57	172389	0.02	
Pb	208	He	31.578	1.93	807733	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	586087	2.15	604198	97.00	30	120	
Ge	72	He	89819	0.37	81288	110.50	30	120	
Ge	72	H2	1018688	1.73	933781	109.09	30	120	
In	115	He	783135	0.65	717634	109.13	30	120	
Lu	175	He	2353090	2.30	2064230	113.99	30	120	

Sample Report

Sample Table

Sample Name	K1604717-026
Data File Name	057SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T12:27:43-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	6.657	1.07	16328	0.04	
Ni	60	He	58.803	2.08	83240	0.07	
Ni	62	He	58.469	2.16	13118	0.45	
Cu	63	He	104.047	1.18	429097	0.02	
Cu	65	He	104.413	1.50	216380	0.05	
Zn	66	He	450.671	1.68	235877	0.19	
As	75	He	36.951	1.91	12158	0.30	
Se	77	H2	10.145	50.47	1674	0.61	
Se	78	H2	2.115	40.82	806	0.26	
Sb	121	He	1.000	3.13	2175	0.05	
Sb	123	He	1.054	1.27	1832	0.06	
[Pb]	206	He	135.843	1.04	821707	0.02	
[Pb]	207	He	132.380	0.52	713332	0.02	
Pb	208	He	136.295	0.12	3379668	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	565260	1.03	604198	93.56	30	120	
Ge	72	He	89507	1.47	81288	110.11	30	120	
Ge	72	H2	739552	36.03	933781	79.20	30	120	
In	115	He	762827	0.97	717634	106.30	30	120	
Lu	175	He	2281258	1.05	2064230	110.51	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	058_CCV.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T12:31:31-07:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	25.298	1.602	65971	0.46	25	101	
Ni	60	He	24.289	1.050	35464	0.87	25	97	
Ni	62	He	25.449	4.227	5893	2.69	25	102	
Cu	63	He	24.183	1.438	102727	0.76	25	97	
Cu	65	He	24.244	2.283	51744	0.87	25	97	
Zn	66	He	24.228	2.611	13093	1.32	25	97	
As	75	He	24.964	0.541	8457	1.60	25	100	
Se	77	H2	25.495	0.718	5436	1.17	25	102	
Se	78	H2	24.494	2.372	14579	0.73	25	98	
Sb	121	He	25.311	1.233	55160	1.45	25	101	
Sb	123	He	25.118	0.383	44254	0.63	25	100	
[Pb]	206	He	23.715	1.189	147091	0.38	25	95	
[Pb]	207	He	23.736	1.674	131133	0.62	25	95	
Pb	208	He	23.827	1.732	605722	0.66	25	95	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	601460	1.14	604198	99.55	30	120	
Ge	72	He	92119	1.68	81288	113.32	30	120	
Ge	72	H2	1050027	1.65	933781	112.45	30	120	
In	115	He	793862	0.38	717634	110.62	30	120	
Lu	175	He	2337986	1.57	2064230	113.26	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	059_CCB.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T12:35:20-07:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	0.012	18.9	49	12.9	0.04	
Ni	60	He	0.010	134.8	139	13.9	0.2	
Ni	62	He	-0.013	-285.9	29	29.0	0.2	
Cu	63	He	0.014	38.2	167	12.5	0.2	
Cu	65	He	0.008	136.9	73	31.8	0.2	
Zn	66	He	0.072	45.3	83	21.2	1	
As	75	He	-0.003	-212.4	6	36.7	0.25	
Se	77	H2	-0.059	-42.4	721	1.5	20	
Se	78	H2	0.006	113.5	12	34.6	0.5	
Sb	121	He	0.008	75.1	106	12.2	0.2	
Sb	123	He	0.023	73.6	93	33.1	0.05	
[Pb]	206	He	0.015	31.5	191	16.8	0.1	
[Pb]	207	He	0.014	32.2	159	15.9	0.1	
Pb	208	He	0.012	20.5	693	12.0	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	603327	1.03	604198	99.86	30	120	
Ge	72	He	89820	0.72	81288	110.50	30	120	
Ge	72	H2	1049271	1.89	933781	112.37	30	120	
In	115	He	808072	1.05	717634	112.60	30	120	
Lu	175	He	2337111	2.83	2064230	113.22	30	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLCCVS
Data File Name	060LCCV.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T12:39:10-07:00
Sample Type	LLCCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	0.045	13.255	134	11.27	0.04	113	
Ni	60	He	0.358	11.651	636	8.53	0.4	90	
Ni	62	He	0.474	13.669	139	9.70	0.4	119	
Cu	63	He	0.198	5.145	936	5.36	0.2	99	
Cu	65	He	0.212	8.804	500	8.35	0.2	106	
Zn	66	He	1.189	13.029	672	11.38	1	119	
As	75	He	1.065	6.578	360	6.46	1	107	
Se	77	H2	2.151	7.372	1117	3.21	2	108	
Se	78	H2	2.009	1.016	1191	2.38	2	100	
Sb	121	He	0.104	20.328	315	14.84	0.1	104	
Sb	123	He	0.109	11.929	245	9.35	0.1	109	
[Pb]	206	He	0.113	12.009	783	10.17	0.1	113	
[Pb]	207	He	0.101	12.843	630	11.70	0.1	101	
Pb	208	He	0.108	2.257	3058	2.51	0.1	108	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	597913	1.97	604198	98.96	30	120	
Ge	72	He	90186	0.85	81288	110.95	30	120	
Ge	72	H2	1039246	1.39	933781	111.29	30	120	
In	115	He	800160	0.20	717634	111.50	30	120	
Lu	175	He	2297329	0.56	2064230	111.29	30	120	

Prep Blank (PB) Report

Sample Table

Sample Name	KQ1605187-01
Data File Name	061_PB.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T12:42:59-07:00
Sample Type	PB
Dilution	1
Comment	5
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	0.008	27.7	38	13.6	0.04	
Ni	60	He	0.072	54.5	229	23.9	0.2	
Ni	62	He	0.113	145.1	58	64.3	0.2	
Cu	63	He	0.026	13.1	219	7.2	0.2	
Cu	65	He	0.023	34.3	106	15.9	0.2	
Zn	66	He	0.257	6.5	182	5.6	1	
As	75	He	0.003	359.9	8	45.8	0.25	
Se	77	H2	0.037	653.1	723	5.8	2	
Se	78	H2	0.007	81.7	12	28.5	0.5	
Sb	121	He	-0.011	-44.6	64	16.8	0.1	
Sb	123	He	0.000	-5473.9	52	19.4	0.05	
[Pb]	206	He	0.009	31.8	158	11.6	0.1	
[Pb]	207	He	0.008	90.0	123	30.7	0.1	
Pb	208	He	0.011	6.9	667	2.6	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	605022	1.73	604198	100.14	30	120	
Ge	72	He	90672	0.75	81288	111.54	30	120	
Ge	72	H2	1027717	2.18	933781	110.06	30	120	
In	115	He	807135	0.51	717634	112.47	30	120	
Lu	175	He	2351107	0.37	2064230	113.90	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	KQ1605187-02
Data File Name	062_LCS.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T12:46:49-07:00
Sample Type	LCS
Dilution	1
Comment	20
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	4.951	0.886	13566	0.59	5	99.0	
Ni	60	He	48.995	2.611	67354	1.40	50	98.0	
Ni	62	He	49.038	1.396	10690	2.58	50	98.1	
Cu	63	He	24.773	1.952	99268	0.74	25	99.1	
Cu	65	He	24.978	1.794	50293	0.92	25	99.9	
Zn	66	He	50.631	1.859	25773	2.94	50	101.3	
As	75	He	50.273	1.558	16059	1.25	50	100.5	
Se	77	H2	52.161	2.380	9780	1.47	50	104.3	
Se	78	H2	50.864	0.690	28593	1.24	50	101.7	
Sb	121	He	49.490	0.419	106355	0.36	50	99.0	
Sb	123	He	49.312	1.156	85688	0.45	50	98.6	
[Pb]	206	He	45.951	0.253	271542	0.43	50	91.9	
[Pb]	207	He	47.799	1.154	251617	1.27	50	95.6	
Pb	208	He	46.822	0.404	1134173	0.64	50	93.6	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	631257	1.38	604198	104.48	30	120	
Ge	72	He	86900	1.20	81288	106.90	30	120	
Ge	72	H2	991792	1.90	933781	106.21	30	120	
In	115	He	783482	0.74	717634	109.18	30	120	
Lu	175	He	2228028	0.25	2064230	107.94	30	120	

All Reference Sample Report

Sample Table

Sample Name	K1605072-001
Data File Name	063_ARF.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T12:50:37-07:00
Sample Type	AllRef
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	6.781	0.78	17680	0.04	
Ni	60	He	13.652	1.54	20329	0.07	
Ni	62	He	13.801	2.98	3267	0.42	
Cu	63	He	31.068	0.15	134193	0.02	
Cu	65	He	31.333	1.19	68000	0.05	
Zn	66	He	158.365	0.29	86789	0.18	
As	75	He	11.256	1.34	3881	0.29	
Se	77	H2	4.170	10.64	1483	0.28	
Se	78	H2	0.646	8.66	388	0.17	
Sb	121	He	0.417	2.07	1004	0.04	
Sb	123	He	0.415	17.96	787	0.05	
[Pb]	206	He	57.469	1.34	365892	0.02	
[Pb]	207	He	52.921	2.07	300146	0.02	
Pb	208	He	55.434	1.45	1446720	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	600889	1.13	604198	99.45	30	120	
Ge	72	He	93679	1.03	81288	115.24	30	120	
Ge	72	H2	1037487	0.82	933781	111.11	30	120	
In	115	He	801364	1.80	717634	111.67	30	120	
Lu	175	He	2400714	0.72	2064230	116.30	30	120	

Sample Report

Sample Table

Sample Name	K1605072-001L
Data File Name	064SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T12:54:37-07:00
Sample Type	Sample
Dilution	1
Comment	25
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	1.369	2.32	3580	0.04	
Ni	60	He	2.724	5.65	4116	0.07	
Ni	62	He	2.830	7.27	689	0.41	
Cu	63	He	6.328	1.40	27128	0.02	
Cu	65	He	6.351	2.01	13682	0.05	
Zn	66	He	32.370	1.27	17587	0.18	
As	75	He	2.402	4.76	825	0.29	
Se	77	H2	0.607	32.73	843	0.07	
Se	78	H2	0.131	12.61	86	0.15	
Sb	121	He	0.068	17.76	239	0.03	
Sb	123	He	0.084	11.11	202	0.04	
[Pb]	206	He	11.959	1.69	74851	0.02	
[Pb]	207	He	10.965	0.69	61137	0.02	
Pb	208	He	11.474	0.73	294369	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	600461	0.98	604198	99.38	30	120	
Ge	72	He	92675	0.48	81288	114.01	30	120	
Ge	72	H2	1048692	1.52	933781	112.31	30	120	
In	115	He	808465	0.06	717634	112.66	30	120	
Lu	175	He	2357648	0.96	2064230	114.21	30	120	

Post Digestion Spike Sample (PDS) Report

Sample Table

Sample Name	K1605072-001A
Data File Name	065_PDS.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T12:58:24-07:00
Sample Type	PDS
Dilution	1
Comment	5
QC Ref File Name	063_ARF.d
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Spk Amt	%Rec	QC Flag
Be	9	No Gas	58.661	2.166	157086	1.03	50	104	
Ni	60	He	62.348	0.460	92856	0.53	50	97	
Ni	62	He	63.204	2.141	14918	1.94	50	99	
Cu	63	He	79.452	0.623	344771	0.82	50	97	
Cu	65	He	79.909	0.742	174237	0.92	50	97	
Zn	66	He	209.072	1.623	115152	1.53	50	101	
As	75	He	60.813	0.936	21048	0.54	50	99	
Se	77	H2	55.386	0.878	11080	1.78	50	102	
Se	78	H2	50.809	1.255	30591	0.34	50	100	
Sb	121	He	50.435	1.046	113021	0.71	50	100	
Sb	123	He	50.458	0.466	91435	0.79	50	100	
[Pb]	206	He	103.378	2.391	661350	0.31	50	92	
[Pb]	207	He	99.098	2.880	564702	0.65	50	92	
Pb	208	He	102.388	3.697	2684481	1.53	50	94	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	617736	1.14	604198	102.24	30	120	
Ge	72	He	94161	0.42	81288	115.84	30	120	
Ge	72	H2	1062254	0.97	933781	113.76	30	120	
In	115	He	817010	0.80	717634	113.85	30	120	
Lu	175	He	2413321	2.25	2064230	116.91	30	120	

Matrix Spike Sample (MS) Report

Sample Table

Sample Name	K1605072-001S
Data File Name	066_Spk.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T13:02:13-07:00
Sample Type	Spike
Dilution	1
Comment	5
QC Ref File Name	063_ARF.d
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Spk Amt	%Rec	QC Flag
Be	9	No Gas	27.853	0.567	72583	0.26	20	105	
Ni	60	He	205.805	1.120	309534	0.58	200	96	
Ni	62	He	205.413	1.616	48939	2.09	200	96	
Cu	63	He	126.087	1.052	553010	0.55	100	95	
Cu	65	He	126.128	0.839	277971	0.45	100	95	
Zn	66	He	335.188	0.789	186598	0.57	200	88	
As	75	He	204.453	0.432	71520	0.36	200	97	
Se	77	H2	202.406	1.355	38689	0.50	200	99	
Se	78	H2	192.957	1.355	116661	0.72	200	96	
Sb	121	He	113.776	0.988	251656	0.27	200	57	Flag
Sb	123	He	113.417	1.054	202877	0.64	200	57	Flag
[Pb]	206	He	253.207	1.121	1614476	1.02	200	98	
[Pb]	207	He	240.770	1.493	1367493	0.89	200	94	
Pb	208	He	247.846	0.760	6477802	0.38	200	96	

PDS OF

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	600989	0.33	604198	99.47	30	120	
Ge	72	He	95188	0.55	81288	117.10	30	120	
Ge	72	H2	1066901	1.04	933781	114.26	30	120	
In	115	He	806774	0.74	717634	112.42	30	120	
Lu	175	He	2404714	0.70	2064230	116.49	30	120	

Matrix Spike Sample (MS) Report

Sample Table

Sample Name	K1605072-001SD
Data File Name	067_Spk.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T13:06:02-07:00
Sample Type	Spike
Dilution	1
Comment	5
QC Ref File Name	063_ARF.d
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Spk Amt	%Rec	QC Flag
Be	9	No Gas	27.270	1.061	69743	1.18	20	102	
Ni	60	He	201.095	1.070	291264	1.04	200	94	
Ni	62	He	199.154	0.542	45692	1.23	200	93	
Cu	63	He	123.967	1.436	523621	1.84	100	93	
Cu	65	He	124.001	0.295	263173	0.69	100	93	
Zn	66	He	334.237	1.144	179180	1.04	200	88	
As	75	He	201.547	0.481	67893	0.27	200	95	
Se	77	H2	231.282	14.427	37489	0.86	200	114	
Se	78	H2	223.682	14.434	114920	0.64	200	112	
Sb	121	He	113.201	0.952	243065	0.99	200	56	Flag
Sb	123	He	113.117	0.463	196427	0.89	200	56	Flag
[Pb]	206	He	236.154	3.826	1480652	4.24	200	89	
[Pb]	207	He	233.977	1.988	1306512	0.02	200	91	
Pb	208	He	237.217	1.535	6095920	1.28	200	91	

PDS OK

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	589824	1.35	604198	97.62	30	120	
Ge	72	He	91664	0.72	81288	112.77	30	120	
Ge	72	H2	918361	13.40	933781	98.35	30	120	
In	115	He	783162	0.71	717634	109.13	30	120	
Lu	175	He	2364637	1.96	2064230	114.55	30	120	

Sample Report

Sample Table

Sample Name	K1605072-002
Data File Name	068SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T13:09:49-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	9.560	1.42	24611	0.04	
Ni	60	He	16.310	0.82	24167	0.07	
Ni	62	He	16.590	0.28	3905	0.42	
Cu	63	He	34.206	1.27	1471S4	0.02	
Cu	65	He	34.020	1.48	73544	0.05	
Zn	66	He	181.080	1.39	98840	0.18	
As	75	He	13.168	1.53	4522	0.29	
Se	77	H2	5.391	4.25	1711	0.32	
Se	78	H2	0.946	1.70	566	0.17	
Sb	121	He	0.490	6.12	1164	0.04	
Sb	123	He	0.509	11.15	956	0.05	
[Pb]	206	He	55.564	1.96	353580	0.02	
[Pb]	207	He	50.118	1.22	284123	0.02	
Pb	208	He	53.299	1.21	1390349	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	593546	2.09	604198	98.24	30	120	
Ge	72	He	93313	0.46	81288	114.79	30	120	
Ge	72	H2	1040509	1.60	933781	111.43	30	120	
In	115	He	802029	0.77	717634	111.76	30	120	
Lu	175	He	2399795	1.64	2064230	116.26	30	120	

Sample Report

Sample Table

Sample Name	K1605072-003
Data File Name	069SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T13:13:37-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	8.085	2.27	20580	0.04	
Ni	60	He	27.054	0.68	40396	0.07	
Ni	62	He	27.201	7.41	6441	0.42	
Cu	63	He	40.438	1.62	175647	0.02	
Cu	65	He	40.773	2.00	88986	0.05	
Zn	66	He	207.597	0.92	114429	0.18	
As	75	He	12.850	2.03	4456	0.29	
Se	77	H2	4.594	1.92	1576	0.29	
Se	78	H2	0.720	5.41	436	0.17	
Sb	121	He	0.275	4.08	691	0.04	
Sb	123	He	0.288	3.07	563	0.05	
[Pb]	206	He	55.046	1.58	349932	0.02	
[Pb]	207	He	48.103	1.63	272401	0.02	
Pb	208	He	51.857	0.96	1351372	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	586788	1.01	604198	97.12	30	120	
Ge	72	He	94236	1.63	81288	115.93	30	120	
Ge	72	H2	1047204	1.51	933781	112.15	30	120	
In	115	He	799756	0.37	717634	111.44	30	120	
Lu	175	He	2397296	1.68	2064230	116.14	30	120	

Sample Report

Sample Table

Sample Name	K1605072-004
Data File Name	070SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T13:17:26-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	17.445	3.00	44425	0.04	
Ni	60	He	23.027	0.95	35304	0.07	
Ni	62	He	22.478	4.17	5471	0.41	
Cu	63	He	34.577	0.52	154152	0.02	
Cu	65	He	34.588	2.01	77481	0.04	
Zn	66	He	209.262	0.72	118363	0.18	
As	75	He	13.533	1.08	4816	0.28	
Se	77	H2	5.407	4.19	1752	0.31	
Se	78	H2	0.877	4.26	537	0.16	
Sb	121	He	0.525	5.36	1236	0.04	
Sb	123	He	0.531	0.60	991	0.05	
[Pb]	206	He	66.337	2.08	417118	0.02	
[Pb]	207	He	58.658	1.64	328582	0.02	
Pb	208	He	63.092	1.64	1626238	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	587378	1.82	604198	97.22	30	120	
Ge	72	He	96699	0.29	81288	118.96	30	120	
Ge	72	H2	1063920	2.64	933781	113.94	30	120	
In	115	He	797521	0.89	717634	111.13	30	120	
Lu	175	He	2371396	1.38	2064230	114.88	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	071_CCV.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T13:21:14-07:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	25.248	1.625	65708	0.60	25	101	
Ni	60	He	25.170	1.431	35990	0.32	25	101	
Ni	62	He	26.155	3.933	5932	2.77	25	105	
Cu	63	He	25.019	1.608	104092	0.75	25	100	
Cu	65	He	25.066	2.421	52400	1.30	25	100	
Zn	66	He	24.687	1.684	13068	1.83	25	99	
As	75	He	25.322	0.875	8402	1.75	25	101	
Se	77	H2	24.811	0.888	5294	0.68	25	99	
Se	78	H2	24.675	1.645	14646	1.31	25	99	
Sb	121	He	25.173	0.419	55074	0.58	25	101	
Sb	123	He	24.960	0.680	44147	0.49	25	100	
[Pb]	206	He	23.387	0.425	145823	0.72	25	94	
[Pb]	207	He	23.544	0.378	130766	0.73	25	94	
Pb	208	He	23.557	0.703	602072	1.07	25	94	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	600254	1.44	604198	99.35	30	120	
Ge	72	He	90223	1.13	81288	110.99	30	120	
Ge	72	H2	1046842	0.34	933781	112.11	30	120	
In	115	He	796987	0.20	717634	111.06	30	120	
Lu	175	He	2350028	0.37	2064230	113.85	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	072_CCB.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T13:25:04-07:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	0.009	41.7	40	23.4	0.04	
Ni	60	He	0.012	30.8	139	5.0	0.2	
Ni	62	He	0.037	209.8	39	40.5	0.2	
Cu	63	He	0.012	50.1	154	12.6	0.2	
Cu	65	He	0.009	20.5	73	4.5	0.2	
Zn	66	He	0.054	94.1	72	37.6	1	
As	75	He	0.011	186.7	10	65.6	0.25	
Se	77	H2	-0.190	-86.3	681	3.8	20	
Se	78	H2	0.005	36.6	11	9.1	0.5	
Sb	121	He	0.005	64.4	97	7.5	0.2	
Sb	123	He	0.016	40.8	78	14.7	0.05	
[Pb]	206	He	0.009	65.4	154	23.8	0.1	
[Pb]	207	He	0.006	86.7	116	26.6	0.1	
Pb	208	He	0.009	47.3	604	17.8	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	580216	1.12	604198	96.03	30	120	
Ge	72	He	87733	2.42	81288	107.93	30	120	
Ge	72	H2	1026077	0.73	933781	109.88	30	120	
In	115	He	789524	1.58	717634	110.02	30	120	
Lu	175	He	2334561	0.55	2064230	113.10	30	120	

Sample Report

Sample Table

Sample Name	K1605072-005
Data File Name	073SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T13:28:54-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	8.677	1.29	22261	0.04	
Ni	60	He	22.020	1.88	32676	0.07	
Ni	62	He	21.955	3.88	5172	0.42	
Cu	63	He	50.253	2.17	216744	0.02	
Cu	65	He	50.664	1.87	109804	0.05	
Zn	66	He	182.374	1.97	99828	0.18	
As	75	He	14.848	3.47	5112	0.29	
Se	77	H2	5.403	5.63	1719	0.31	
Se	78	H2	0.941	3.71	565	0.17	
Sb	121	He	0.556	4.90	1301	0.04	
Sb	123	He	0.566	3.81	1052	0.05	
[Pb]	206	He	75.676	0.43	484306	0.02	
[Pb]	207	He	69.849	0.35	398203	0.02	
Pb	208	He	73.042	0.21	1916113	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	591433	1.13	604198	97.89	30	120	
Ge	72	He	93590	1.37	81288	115.13	30	120	
Ge	72	H2	1044148	1.62	933781	111.82	30	120	
In	115	He	797110	1.06	717634	111.07	30	120	
Lu	175	He	2413186	0.31	2064230	116.90	30	120	

Sample Report

Sample Table

Sample Name	K1605072-006
Data File Name	074SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T13:32:43-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	6.038	0.73	15686	0.04	
Ni	60	He	8.462	1.73	12767	0.07	
Ni	62	He	8.972	2.56	2155	0.42	
Cu	63	He	14.265	3.41	62226	0.02	
Cu	65	He	14.230	2.03	31199	0.05	
Zn	66	He	107.314	2.90	59353	0.18	
As	75	He	9.624	4.99	3348	0.29	
Se	77	H2	4.771	4.76	1592	0.30	
Se	78	H2	0.697	12.10	417	0.17	
Sb	121	He	0.244	7.89	628	0.04	
Sb	123	He	0.248	5.82	495	0.05	
[Pb]	206	He	45.785	1.19	290909	0.02	
[Pb]	207	He	38.791	1.70	219540	0.02	
Pb	208	He	42.704	1.53	1112142	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	598663	1.58	604198	99.08	30	120	
Ge	72	He	94567	2.80	81288	116.34	30	120	
Ge	72	H2	1036486	0.48	933781	111.00	30	120	
In	115	He	806796	0.66	717634	112.42	30	120	
Lu	175	He	2395808	1.82	2064230	116.06	30	120	

Sample Report

Sample Table

Sample Name	K1605072-007
Data File Name	075SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T13:36:33-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	5.055	1.94	13139	0.04	
Ni	60	He	18.037	0.67	26849	0.07	
Ni	62	He	17.917	4.37	4235	0.42	
Cu	63	He	46.401	0.26	200595	0.02	
Cu	65	He	46.432	1.78	100853	0.05	
Zn	66	He	162.815	0.73	89334	0.18	
As	75	He	11.513	2.26	3974	0.29	
Se	77	H2	3.714	4.48	1406	0.26	
Se	78	H2	0.627	5.51	378	0.17	
Sb	121	He	0.468	6.90	1127	0.04	
Sb	123	He	0.509	6.53	964	0.05	
[Pb]	206	He	75.774	1.81	490337	0.02	
[Pb]	207	He	70.563	1.62	406756	0.02	
Pb	208	He	73.104	1.61	1939137	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	598939	1.81	604198	99.13	30	120	
Ge	72	He	93787	1.13	81288	115.38	30	120	
Ge	72	H2	1041653	1.66	933781	111.55	30	120	
In	115	He	809193	0.62	717634	112.76	30	120	
Lu	175	He	2440499	1.53	2064230	118.23	30	120	

Sample Report

Sample Table

Sample Name	K1605072-008
Data File Name	076SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T13:40:24-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	7.534	0.54	19521	0.04	
Ni	60	He	22.758	2.54	33691	0.07	
Ni	62	He	22.821	0.90	5366	0.43	
Cu	63	He	48.445	1.99	208519	0.02	
Cu	65	He	49.345	2.00	106731	0.05	
Zn	66	He	199.981	3.35	109218	0.18	
As	75	He	15.194	3.79	5218	0.29	
Se	77	H2	5.335	0.35	1654	0.32	
Se	78	H2	0.867	10.13	505	0.17	
Sb	121	He	0.560	6.21	1280	0.04	
Sb	123	He	0.544	5.00	989	0.05	
[Pb]	206	He	73.649	1.56	450293	0.02	
[Pb]	207	He	66.294	1.35	361073	0.02	
Pb	208	He	70.129	1.32	1757557	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	597161	0.98	604198	98.84	30	120	
Ge	72	He	93422	3.46	81288	114.93	30	120	
Ge	72	H2	1012016	1.84	933781	108.38	30	120	
In	115	He	778936	2.36	717634	108.54	30	120	
Lu	175	He	2305572	1.01	2064230	111.69	30	120	

Sample Report

Sample Table

Sample Name	K1605072-009
Data File Name	077SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T13:44:13-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	5.167	1.63	13629	0.04	
Ni	60	He	26.961	0.35	40049	0.07	
Ni	62	He	26.923	5.30	6345	0.42	
Cu	63	He	48.859	0.49	211109	0.02	
Cu	65	He	49.033	0.84	106459	0.05	
Zn	66	He	228.807	0.56	125453	0.18	
As	75	He	13.263	1.85	4575	0.29	
Se	77	H2	2.775	10.56	1247	0.22	
Se	78	H2	0.471	3.21	289	0.16	
Sb	121	He	0.511	10.08	1222	0.04	
Sb	123	He	0.506	6.95	960	0.05	
[Pb]	206	He	53.840	1.26	338455	0.02	
[Pb]	207	He	49.843	1.65	279096	0.02	
Pb	208	He	51.951	1.01	1338654	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	607653	1.06	604198	100.57	30	120	
Ge	72	He	93738	0.38	81288	115.32	30	120	
Ge	72	H2	1052559	0.68	933781	112.72	30	120	
In	115	He	809677	0.87	717634	112.83	30	120	
Lu	175	He	2370391	1.29	2064230	114.83	30	120	

Sample Report

Sample Table

Sample Name	K1605072-010
Data File Name	078SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T13:48:03-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	4.794	1.67	12778	0.04	
Ni	60	He	29.509	2.47	44033	0.07	
Ni	62	He	29.548	0.83	6995	0.42	
Cu	63	He	42.229	0.49	183371	0.02	
Cu	65	He	42.632	1.25	93019	0.05	
Zn	66	He	210.339	0.55	115897	0.18	
As	75	He	13.759	3.41	4769	0.29	
Se	77	H2	3.070	3.29	1296	0.24	
Se	78	H2	0.580	7.89	353	0.16	
Sb	121	He	0.545	3.57	1302	0.04	
Sb	123	He	0.522	4.57	991	0.05	
[Pb]	206	He	51.428	1.90	323847	0.02	
[Pb]	207	He	48.491	1.98	272015	0.02	
Pb	208	He	50.067	1.98	1292344	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	613965	0.41	604198	101.62	30	120	
Ge	72	He	94200	0.62	81288	115.88	30	120	
Ge	72	H2	1047659	1.52	933781	112.20	30	120	
In	115	He	811512	0.61	717634	113.08	30	120	
Lu	175	He	2374873	2.03	2064230	115.05	30	120	

Sample Report

Sample Table

Sample Name	K1605072-011
Data File Name	079SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T13:51:51-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

EJ 6/1/16 Sol Reuse

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	3.488	0.45	9019	0.04	
Ni	60	He	25.307	28.81	30684	0.08	
Ni	62	He	25.485	27.84	4911	0.52	
Cu	63	He	37.301	28.06	131688	0.03	
Cu	65	He	37.547	26.77	66738	0.06	
Zn	66	He	179.295	28.57	80264	0.22	
As	75	He	13.983	25.21	3957	0.35	
Se	77	H2	2.111	2.92	1102	0.19	
Se	78	H2	0.305	10.22	187	0.16	
Sb	121	He	0.597	28.48	1154	0.05	
Sb	123	He	0.611	27.40	939	0.07	
[Pb]	206	He	103.873	30.67	527629	0.02	
[Pb]	207	He	98.819	30.85	446994	0.02	
Pb	208	He	101.152	31.03	2104863	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	595478	1.70	604198	98.56	30	120	
Ge	72	He	79839	21.86	81288	98.22	30	120	
Ge	72	H2	1032197	1.80	933781	110.54	30	120	
In	115	He	689937	23.41	717634	96.14	30	120	
Lu	175	He	2016132	24.46	2064230	97.67	30	120	

Sample Report

Sample Table

Sample Name	K1605072-012
Data File Name	080SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T13:55:42-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	3.978	2.48	10498	0.04	
Ni	60	He	17.056	2.53	25111	0.07	
Ni	62	He	16.985	1.17	3973	0.43	
Cu	63	He	27.135	1.32	116041	0.02	
Cu	65	He	27.292	0.95	58647	0.05	
Zn	66	He	113.287	1.75	61476	0.18	
As	75	He	10.722	2.78	3661	0.29	
Se	77	H2	3.251	9.81	1311	0.25	
Se	78	H2	0.440	12.01	266	0.17	
Sb	121	He	0.309	3.53	767	0.04	
Sb	123	He	0.320	11.56	621	0.05	
[Pb]	206	He	30.756	1.39	194070	0.02	
[Pb]	207	He	28.814	0.19	161965	0.02	
Pb	208	He	29.783	0.78	770356	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	607844	0.73	604198	100.60	30	120	
Ge	72	He	92741	0.48	81288	114.09	30	120	
Ge	72	H2	1033678	1.74	933781	110.70	30	120	
In	115	He	803091	0.49	717634	111.91	30	120	
Lu	175	He	2378675	0.39	2064230	115.23	30	120	

Sample Report

Sample Table

Sample Name	K1605072-013
Data File Name	081SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T13:59:31-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	5.136	1.79	13351	0.04	
Ni	60	He	37.517	1.30	55542	0.07	
Ni	62	He	37.344	4.15	8766	0.43	
Cu	63	He	52.885	0.95	227954	0.02	
Cu	65	He	53.292	0.27	115427	0.05	
Zn	66	He	158.936	1.72	86947	0.18	
As	75	He	25.256	1.51	8686	0.29	
Se	77	H2	3.902	2.21	1424	0.27	
Se	78	H2	0.803	6.78	476	0.17	
Sb	121	He	0.886	4.89	2040	0.04	
Sb	123	He	0.891	6.95	1638	0.05	
[Pb]	206	He	61.627	0.46	400548	0.02	
[Pb]	207	He	59.896	2.04	346749	0.02	
Pb	208	He	61.021	1.29	1625640	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	598994	1.61	604198	99.14	30	120	
Ge	72	He	93520	0.94	81288	115.05	30	120	
Ge	72	H2	1029823	0.62	933781	110.29	30	120	
In	115	He	802994	0.88	717634	111.89	30	120	
Lu	175	He	2450791	1.05	2064230	118.73	30	120	

Sample Report

Sample Table

Sample Name	K1605072-014
Data File Name	082SMPL.d
Data Path Name	D:\Data\Experiments\0S2616A1.b
Acq Date Time	2016-05-26T14:03:21-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	5.974	1.55	15651	0.04	
Ni	60	He	24.917	1.04	37015	0.07	
Ni	62	He	24.942	2.23	5880	0.42	
Cu	63	He	36.795	0.77	158988	0.02	
Cu	65	He	36.907	0.85	80131	0.05	
Zn	66	He	162.547	1.00	89125	0.18	
As	75	He	15.580	0.58	5373	0.29	
Se	77	H2	4.434	2.31	1523	0.29	
Se	78	H2	0.663	5.74	396	0.17	
Sb	121	He	0.552	5.25	1308	0.04	
Sb	123	He	0.554	3.80	1042	0.05	
[Pb]	206	He	40.730	0.75	254802	0.02	
[Pb]	207	He	37.980	0.91	211652	0.02	
Pb	208	He	39.482	0.83	1012462	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	603730	1.53	604198	99.92	30	120	
Ge	72	He	93724	0.47	81288	115.30	30	120	
Ge	72	H2	1031971	1.95	933781	110.52	30	120	
In	115	He	806219	0.57	717634	112.34	30	120	
Lu	175	He	2358632	0.85	2064230	114.26	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	083_CCV.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T14:07:11-07:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	25.257	2.043	65991	0.48	25	101	
Ni	60	He	24.256	1.519	35667	1.22	25	97	
Ni	62	He	24.215	5.510	5650	4.92	25	97	
Cu	63	He	24.015	2.937	102717	1.07	25	96	
Cu	65	He	24.292	1.237	52220	0.99	25	97	
Zn	66	He	24.205	2.857	13173	1.46	25	97	
As	75	He	24.607	2.050	8394	1.03	25	98	
Se	77	H2	24.840	0.571	5349	1.23	25	99	
Se	78	H2	24.092	1.300	14433	0.69	25	96	
Sb	121	He	25.165	1.022	55468	1.07	25	101	
Sb	123	He	25.099	1.158	44723	0.48	25	100	
[Pb]	206	He	22.931	0.934	143361	1.05	25	92	
[Pb]	207	He	23.135	0.711	128836	0.49	25	93	
Pb	208	He	23.155	0.241	593371	0.06	25	93	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	602704	2.02	604198	99.75	30	120	
Ge	72	He	92778	2.15	81288	114.14	30	120	
Ge	72	H2	1056677	1.39	933781	113.16	30	120	
In	115	He	802950	0.68	717634	111.89	30	120	
Lu	175	He	2356307	0.25	2064230	114.15	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	084_CCB.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T14:11:01-07:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	0.008	27.9	38	13.9	0.04	
Ni	60	He	0.008	204.1	140	16.7	0.2	
Ni	62	He	-0.026	-167.8	27	37.5	0.2	
Cu	63	He	0.009	44.6	150	11.5	0.2	
Cu	65	He	0.008	54.4	76	13.5	0.2	
Zn	66	He	0.058	41.9	78	16.2	1	
As	75	He	0.002	684.6	7	51.6	0.25	
Se	77	H2	0.153	25.3	768	1.9	20	
Se	78	H2	-0.006	-82.7	5	52.9	0.5	
Sb	121	He	0.004	290.0	97	23.7	0.2	
Sb	123	He	0.023	31.0	93	15.0	0.05	
[Pb]	206	He	0.003	82.4	121	14.1	0.1	
[Pb]	207	He	0.012	51.3	147	21.9	0.1	
Pb	208	He	0.007	26.8	568	7.4	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	614197	1.45	604198	101.65	30	120	
Ge	72	He	91971	1.08	81288	113.14	30	120	
Ge	72	H2	1060149	1.57	933781	113.53	30	120	
In	115	He	805562	1.38	717634	112.25	30	120	
Lu	175	He	2366469	1.27	2064230	114.64	30	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLCCVS
Data File Name	085LCCV.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T14:14:51-07:00
Sample Type	LLCCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	0.051	21.228	151	20.07	0.04	127	
Ni	60	He	0.451	13.602	773	12.32	0.4	113	
Ni	62	He	0.407	7.388	124	6.18	0.4	102	
Cu	63	He	0.232	12.116	1081	10.29	0.2	116	
Cu	65	He	0.223	11.998	524	9.65	0.2	111	
Zn	66	He	1.029	10.732	591	8.67	1	103	
As	75	He	1.021	5.613	347	6.65	1	102	
Se	77	H2	1.867	4.330	1083	3.56	2	93	
Se	78	H2	1.879	3.569	1133	4.74	2	94	
Sb	121	He	0.111	16.302	331	12.80	0.1	111	
Sb	123	He	0.107	15.026	242	12.77	0.1	107	
[Pb]	206	He	0.109	4.065	779	4.37	0.1	109	
[Pb]	207	He	0.098	6.627	628	5.85	0.1	98	
Pb	208	He	0.104	0.262	3031	0.66	0.1	104	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	607904	1.43	604198	100.61	30	120	
Ge	72	He	90681	1.18	81288	111.56	30	120	
Ge	72	H2	1055790	2.19	933781	113.07	30	120	
In	115	He	799848	1.27	717634	111.46	30	120	
Lu	175	He	2352220	0.89	2064230	113.95	30	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLCCVS 2X
Data File Name	086_QC1.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T14:18:42-07:00
Sample Type	QC1
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

CB 6/26/16 not needed

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	0.084	8.258	238	6.85	0.08	105	
Ni	60	He	0.906	4.020	1389	2.98	0.8	113	
Ni	62	He	0.807	6.813	210	5.72	0.8	101	
Cu	63	He	0.406	9.813	1762	5.58	0.4	102	
Cu	65	He	0.383	6.062	840	2.75	0.4	96	
Zn	66	He	1.927	6.029	1041	1.96	2	96	
As	75	He	1.926	4.213	634	7.18	2	96	
Se	77	H2	4.267	8.159	1436	3.48	4	107	
Se	78	H2	3.877	4.468	2187	3.39	4	97	
Sb	121	He	0.219	11.371	553	8.28	0.2	109	
Sb	123	He	0.221	1.602	432	3.86	0.2	110	
[Pb]	206	He	0.182	7.348	1203	2.09	0.2	91	
[Pb]	207	He	0.203	5.670	1181	7.32	0.2	101	
Pb	208	He	0.187	6.917	5031	4.44	0.2	93	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	608278	0.90	604198	100.68	30	120	
Ge	72	He	88543	3.75	81288	108.93	30	120	
Ge	72	H2	992414	1.40	933781	106.28	30	120	
In	115	He	780944	3.68	717634	108.82	30	120	
Lu	175	He	2299760	4.85	2064230	111.41	30	120	

Sample Report

Sample Table

Sample Name	LLCCVS 1.0 ppb
Data File Name	087SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T14:22:33-07:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

CJ 5/26/16 not needed

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	1.069	2.14	2786	0.04	
Ni	60	He	1.053	5.40	1647	0.06	
Ni	62	He	1.142	5.41	293	0.39	
Cu	63	He	1.085	2.62	4677	0.02	
Cu	65	He	1.048	1.20	2274	0.05	
Zn	66	He	1.347	6.25	766	0.18	
As	75	He	0.944	7.36	324	0.29	
Se	77	H2	0.987	19.65	912	0.11	
Se	78	H2	0.997	3.78	600	0.17	
Sb	121	He	0.927	2.49	2112	0.04	
Sb	123	He	0.913	3.12	1663	0.05	
[Pb]	206	He	0.997	1.96	6331	0.02	
[Pb]	207	He	0.973	3.62	5502	0.02	
Pb	208	He	0.988	1.02	25712	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	597638	0.77	604198	98.91	30	120	
Ge	72	He	91375	0.40	81288	112.41	30	120	
Ge	72	H2	1047164	1.28	933781	112.14	30	120	
In	115	He	796815	0.50	717634	111.03	30	120	
Lu	175	He	2358975	1.34	2064230	114.28	30	120	

Sample Report

Sample Table

Sample Name	K1605072-015
Data File Name	088SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T14:26:23-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	4.519	3.31	10763	0.04	
Ni	60	He	23.906	1.39	32799	0.07	
Ni	62	He	24.625	2.53	5361	0.46	
Cu	63	He	40.995	0.93	163561	0.03	
Cu	65	He	41.531	1.42	83259	0.05	
Zn	66	He	132.298	1.79	66991	0.20	
As	75	He	12.890	2.15	4106	0.31	
Se	77	H2	3.971	5.39	1371	0.29	
Se	78	H2	0.624	5.04	356	0.18	
Sb	121	He	0.418	2.30	936	0.04	
Sb	123	He	0.439	11.15	774	0.06	
[Pb]	206	He	41.344	0.91	248043	0.02	
[Pb]	207	He	39.313	1.37	210096	0.02	
Pb	208	He	40.327	0.91	991724	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	548867	1.61	604198	90.84	30	120	
Ge	72	He	86553	0.75	81288	106.48	30	120	
Ge	72	H2	982848	1.66	933781	105.25	30	120	
In	115	He	746141	0.65	717634	103.97	30	120	
Lu	175	He	2261979	0.90	2064230	109.58	30	120	

Sample Report

Sample Table

Sample Name	K1605072-016
Data File Name	089SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T14:30:11-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	3.586	1.08	8701	0.04	
Ni	60	He	32.142	2.31	44506	0.07	
Ni	62	He	32.193	3.13	7073	0.46	
Cu	63	He	89.506	1.94	360587	0.02	
Cu	65	He	90.448	1.47	183105	0.05	
Zn	66	He	179.342	2.18	91715	0.20	
As	75	He	14.326	1.42	4609	0.31	
Se	77	H2	3.941	2.46	1371	0.29	
Se	78	H2	0.786	7.22	447	0.18	
Sb	121	He	0.568	2.98	1249	0.05	
Sb	123	He	0.584	1.12	1018	0.06	
[Pb]	206	He	70.824	0.57	430568	0.02	
[Pb]	207	He	68.758	0.75	372351	0.02	
Pb	208	He	69.876	0.53	1741291	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	558805	1.55	604198	92.49	30	120	
Ge	72	He	87441	1.68	81288	107.57	30	120	
Ge	72	H2	986788	0.76	933781	105.68	30	120	
In	115	He	749087	0.18	717634	104.38	30	120	
Lu	175	He	2292419	0.96	2064230	111.05	30	120	

Sample Report

Sample Table

Sample Name	K1605072-017
Data File Name	090SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T14:34:02-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	3.707	1.72	9475	0.04	
Ni	60	He	129.079	0.85	183882	0.07	
Ni	62	He	130.115	0.80	29362	0.44	
Cu	63	He	80.356	0.45	333757	0.02	
Cu	65	He	81.939	0.91	171004	0.05	
Zn	66	He	305.243	0.60	160901	0.19	
As	75	He	15.775	2.59	5230	0.30	
Se	77	H2	2.605	7.75	1181	0.22	
Se	78	H2	0.453	7.46	270	0.17	
Sb	121	He	0.373	4.66	877	0.04	
Sb	123	He	0.346	2.10	644	0.05	
[Pb]	206	He	41.610	0.74	259139	0.02	
[Pb]	207	He	41.188	0.56	228498	0.02	
Pb	208	He	41.427	0.15	1057545	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	588631	1.31	604198	97.42	30	120	
Ge	72	He	90130	0.98	81288	110.88	30	120	
Ge	72	H2	1021884	2.45	933781	109.44	30	120	
In	115	He	775469	1.10	717634	108.06	30	120	
Lu	175	He	2347981	0.50	2064230	113.75	30	120	

Sample Report

Sample Table

Sample Name	K1605072-018
Data File Name	091SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T14:37:S2-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	3.343	2.71	8655	0.04	
Ni	60	He	103.437	1.01	150179	0.07	
Ni	62	He	103.935	1.43	23908	0.43	
Cu	63	He	66.774	1.30	282639	0.02	
Cu	65	He	66.867	1.05	142221	0.05	
Zn	66	He	245.827	1.21	132058	0.19	
As	75	He	12.165	1.27	4113	0.30	
Se	77	H2	2.340	1.65	1159	0.20	
Se	78	H2	0.391	4.88	240	0.16	
Sb	121	He	0.322	8.54	784	0.04	
Sb	123	He	0.338	12.18	643	0.05	
[Pb]	206	He	38.035	0.59	241597	0.02	
[Pb]	207	He	37.729	0.81	213470	0.02	
Pb	208	He	37.999	1.11	989332	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	596286	1.61	604198	98.69	30	120	
Ge	72	He	91849	0.72	81288	112.99	30	120	
Ge	72	H2	1045440	1.44	933781	111.96	30	120	
In	115	He	791198	0.35	717634	110.25	30	120	
Lu	175	He	2394713	0.75	2064230	116.01	30	120	

Sample Report

Sample Table

Sample Name	K1605072-019
Data File Name	092SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T14:41:41-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	3.516	1.30	9203	0.04	
Ni	60	He	108.803	0.62	158673	0.07	
Ni	62	He	110.519	1.83	25532	0.43	
Cu	63	He	77.313	0.54	328700	0.02	
Cu	65	He	77.769	0.73	166138	0.05	
Zn	66	He	266.242	0.64	143663	0.19	
As	75	He	31.605	1.44	10721	0.29	
Se	77	H2	2.489	13.22	1177	0.21	
Se	78	H2	0.457	8.10	277	0.17	
Sb	121	He	0.318	8.72	786	0.04	
Sb	123	He	0.362	1.64	694	0.05	
[Pb]	206	He	44.389	0.60	282502	0.02	
[Pb]	207	He	43.587	1.39	247086	0.02	
Pb	208	He	43.977	0.91	1147241	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	602819	2.00	604198	99.77	30	120	
Ge	72	He	922S6	0.56	81288	113.49	30	120	
Ge	72	H2	1038001	1.15	933781	111.16	30	120	
In	115	He	799943	0.62	717634	111.47	30	120	
Lu	175	He	2399636	1.54	2064230	116.25	30	120	

Sample Report

Sample Table

Sample Name	K1605072-020
Data File Name	093SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T14:45:31-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	3.914	1.21	10396	0.04	
Ni	60	He	83.696	1.80	123539	0.07	
Ni	62	He	83.975	2.14	19645	0.43	
Cu	63	He	58.534	1.44	251863	0.02	
Cu	65	He	59.169	1.22	127932	0.05	
Zn	66	He	231.195	1.57	126248	0.18	
As	75	He	13.640	1.10	4686	0.29	
Se	77	H2	2.837	8.51	1243	0.23	
Se	78	H2	0.404	7.08	246	0.16	
Sb	121	He	0.265	7.04	677	0.04	
Sb	123	He	0.295	10.88	581	0.05	
[Pb]	206	He	37.902	1.20	243475	0.02	
[Pb]	207	He	36.901	1.09	211156	0.02	
Pb	208	He	37.476	0.78	986789	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	611701	1.27	604198	101.24	30	120	
Ge	72	He	93371	1.44	81288	114.87	30	120	
Ge	72	H2	1039203	1.72	933781	111.29	30	120	
In	115	He	810046	0.58	717634	112.88	30	120	
Lu	175	He	2421792	0.24	2064230	117.32	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	094_CCV.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T14:49:20-07:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	25.168	1.775	65628	0.61	25	101	
Ni	60	He	25.003	2.527	35928	1.23	25	100	
Ni	62	He	24.985	6.288	5695	4.91	25	100	
Cu	63	He	24.400	1.673	102024	0.31	25	98	
Cu	65	He	24.290	1.729	51037	1.03	25	97	
Zn	66	He	24.251	2.611	12900	1.23	25	97	
As	75	He	25.102	0.852	8370	0.66	25	100	
Se	77	H2	24.967	1.915	5254	1.37	25	100	
Se	78	H2	24.459	2.218	14331	2.13	25	98	
Sb	121	He	25.041	2.379	55089	1.74	25	100	
Sb	123	He	24.920	0.824	44327	1.49	25	100	
[Pb]	206	He	22.890	0.965	144703	0.94	25	92	
[Pb]	207	He	22.767	0.686	128209	1.26	25	91	
Pb	208	He	22.740	0.334	589267	1.04	25	91	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	601485	2.13	604198	99.55	30	120	
Ge	72	He	90678	1.39	81288	111.55	30	120	
Ge	72	H2	1033383	1.03	933781	110.67	30	120	
In	115	He	801483	0.89	717634	111.68	30	120	
Lu	175	He	2382664	0.72	2064230	115.43	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	095_CCB.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T14:53:11-07:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	0.005	18.8	30	8.5	0.04	
Ni	60	He	0.037	59.8	179	17.7	0.2	
Ni	62	He	0.060	167.8	46	49.8	0.2	
Cu	63	He	0.014	13.3	171	4.9	0.2	
Cu	65	He	0.006	123.5	69	21.8	0.2	
Zn	66	He	0.025	124.9	59	27.9	1	
As	75	He	-0.005	-217.0	5	72.1	0.25	
Se	77	H2	-0.123	-59.6	701	0.8	20	
Se	78	H2	-0.001	-169.1	7	20.8	0.5	
Sb	121	He	0.008	119.8	106	20.0	0.2	
Sb	123	He	0.017	87.4	81	31.9	0.05	
[Pb]	206	He	0.004	111.7	126	25.5	0.1	
[Pb]	207	He	0.006	68.6	116	21.8	0.1	
Pb	208	He	0.007	2S.7	556	8.7	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	600790	1.25	604198	99.44	30	120	
Ge	72	He	90373	0.29	81288	111.18	30	120	
Ge	72	H2	1037795	1.44	933781	111.14	30	120	
In	115	He	798185	0.42	717634	111.22	30	120	
Lu	175	He	2345908	1.64	2064230	113.65	30	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLCCVS
Data File Name	096LCCV.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T14:57:02-07:00
Sample Type	LLCCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	0.046	0.592	137	2.76	0.04	116	
Ni	60	He	0.386	10.875	677	8.11	0.4	97	
Ni	62	He	0.420	20.995	127	14.65	0.4	105	
Cu	63	He	0.208	8.163	974	6.44	0.2	104	
Cu	65	He	0.237	10.226	552	9.78	0.2	118	
Zn	66	He	1.132	5.597	643	4.49	1	113	
As	75	He	1.051	5.905	355	4.89	1	105	
Se	77	H2	2.097	11.879	1108	3.29	2	105	
Se	78	H2	1.977	2.924	1173	3.98	2	99	
Sb	121	He	0.102	20.318	308	15.56	0.1	102	
Sb	123	He	0.114	16.228	249	11.81	0.1	114	
[Pb]	206	He	0.092	5.744	678	3.97	0.1	92	
[Pb]	207	He	0.100	8.227	640	8.02	0.1	100	
Pb	208	He	0.096	0.889	2845	0.41	0.1	96	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	600408	2.77	604198	99.37	30	120	
Ge	72	He	90316	1.23	81288	111.11	30	120	
Ge	72	H2	1039732	1.09	933781	111.35	30	120	
In	115	He	790190	1.07	717634	110.11	30	120	
Lu	175	He	2361348	1.16	2064230	114.39	30	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLCCVS 2X
Data File Name	097_QC1.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T1S:00:51-07:00
Sample Type	QC1
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

Dy 5/26/16 not needed

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	0.083	11.033	234	9.71	0.08	104	
Ni	60	He	0.763	4.921	1224	3.63	0.8	95	
Ni	62	He	0.755	24.111	204	20.77	0.8	94	
Cu	63	He	0.409	7.197	1828	6.65	0.4	102	
Cu	65	He	0.398	5.740	896	5.05	0.4	99	
Zn	66	He	1.953	2.540	1086	1.80	2	98	
As	75	He	1.925	2.909	651	2.48	2	96	
Se	77	H2	4.117	4.984	1479	2.57	4	103	
Se	78	H2	3.808	3.030	2254	2.71	4	95	
Sb	121	He	0.209	3.452	546	4.28	0.2	105	
Sb	123	He	0.208	3.501	419	1.79	0.2	104	
[Pb]	206	He	0.172	15.647	1178	13.28	0.2	86	
[Pb]	207	He	0.182	10.893	1099	9.30	0.2	91	
Pb	208	He	0.183	8.037	5104	6.51	0.2	92	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	601056	1.30	604198	99.48	30	120	
Ge	72	He	91059	0.78	81288	112.02	30	120	
Ge	72	H2	1041097	0.31	933781	111.49	30	120	
In	115	He	798068	1.44	717634	111.21	30	120	
Lu	175	He	2372024	2.09	2064230	114.91	30	120	

Sample Report

Sample Table

Sample Name	LLCCVS 1.0 ppb
Data File Name	098SMPL.d
Data Path Name	D:\Data\Experiments\052616A1.b
Acq Date Time	2016-05-26T15:04:41-07:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

CG 5/26/16 not needed

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	1.030	7.52	2685	0.04	
Ni	60	He	1.051	3.91	1647	0.06	
Ni	62	He	0.965	34.75	253	0.38	
Cu	63	He	1.028	3.75	4449	0.02	
Cu	65	He	1.079	2.31	2344	0.05	
Zn	66	He	1.389	6.75	790	0.18	
As	75	He	1.023	3.93	351	0.29	
Se	77	H2	1.124	18.45	939	0.12	
Se	78	H2	0.984	1.94	594	0.17	
Sb	121	He	0.904	3.32	2050	0.04	
Sb	123	He	0.929	4.11	1681	0.06	
[Pb]	206	He	0.958	1.38	6117	0.02	
[Pb]	207	He	0.969	3.28	5505	0.02	
Pb	208	He	0.951	2.61	24871	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	597880	1.92	604198	98.95	30	120	
Ge	72	He	91535	0.41	81288	112.61	30	120	
Ge	72	H2	1050175	1.27	933781	112.46	30	120	
In	115	He	791990	1.00	717634	110.36	30	120	
Lu	175	He	2369649	1.58	2064230	114.80	30	120	

Service Request #	K1605072 (#11 rerun)		
Calibration	060116AMS05		
QC in calibration	060116AMS05		
QC Service Request #	K1605072		
STARLIMS run #			
CAL STD	MS20-43-C	ICSA STD	MS20-42-E
ICV STD	MS20-42-G	ICSAB STD	MS20-42-F
LLICV STD	MS20-42-B	INT STD	MS20-29-I

6020 DOD Data Review Form

	Yes	No	NA
1. Mass calibration <0.1 amu?	X		
2. Resolution <0.9 amu at 10% peak height?	X		
3. Stability RSD ≤5% for five replicates?	X		
4. Appropriate standardization completed?	X		
5. ICV within 10% of true value?	X		
6. CCV's within 10% of true?	X		
7. ICB/CCB's <LOD?	X		
8. Initial Low-level cal. check ± 20%	X		
9. ICSA/ICSAB within ± 20%	X		
10. Method blank <½ the LOQ?	X		
11. LCS within 80-120% DoD limit?	X		
12. Spikes within 80-120% DoD limit?	X		
13. Duplicate Spike RPD <20% DoD limit?	X		
14. Serial dilution within 10%?	X		
15. Post spike within 80-120% DoD limit?	X		
16. Internal standards within 30-120%?	X		
17. Linear range established with High CCV?	X		
18. Adequate rinse out time allowed?	X		
19. Interferences checked?	X		
20. Se over MRL?		X	
21. Cd Correction Applied?		X	
22. Was run prematurely stopped, If so why?		X	

Comments: LRS=500 ppb.

Primary Review by [redacted] Date 6/1/16

Secondary Review by [redacted] Date 10/9/16

R:\icp\misc\data review forms\icpms review form

Sample

		Rjct	Data File	Acq. Date-Time	Type	Sample Name	Comment
1			001CALB.	6/1/2016 7:08:48 AM	CalBlk	Rinse	
2			002CALB.	6/1/2016 7:13:24 AM	CalBlk	Rinse	
3			003CALB.	6/1/2016 7:18:00 AM	CalBlk	Prime	
4			004CALB.	6/1/2016 7:22:36 AM	CalBlk	Blank	
5			005CALS.	6/1/2016 7:27:12 AM	CalStd	25ppb	
6			006_ICV.d	6/1/2016 7:31:48 AM	ICV	ICV	
7	✓		007_CCV.	6/1/2016 7:36:23 AM	CCV	CCV	
8			008_CCV.	6/1/2016 7:40:58 AM	CCV	CCV	
9			009_ICB.d	6/1/2016 7:45:35 AM	ICB	ICB	
10			010_CCB.	6/1/2016 7:50:11 AM	CCB	CCB	
11			011LICV.d	6/1/2016 7:54:46 AM	LLICV	LLICVS	
12			012SMPL.	6/1/2016 7:59:23 AM	Sample	LRSTD	
13			013ICSA.d	6/1/2016 8:03:24 AM	ICSA	ICSA	
14			014ICSB.d	6/1/2016 8:07:29 AM	ICSB	ICSAB	
15			015SMPL.	6/1/2016 8:11:33 AM	Sample	K1605072-011	5
16			016_PB.d	6/1/2016 8:15:39 AM	LCS	KQ1605181-02	20
17			017_LCS.d	6/1/2016 8:19:46 AM	PB	KQ1605181-01	5
18			018_ARF.d	6/1/2016 8:23:52 AM	AllRef	K1605094-001	5
19			019SMPL.	6/1/2016 8:27:57 AM	Sample	K1605094-001L	25
20			020_PDS.d	6/1/2016 8:32:03 AM	PDS	K1605094-001A	5
21	✓		021_Spk.d	6/1/2016 8:36:10 AM	Spike	K1605094-001S	5
22	✓		022_Spk.d	6/1/2016 8:40:14 AM	Spike	K1605094-001SD	5
23			023SMPL.	6/1/2016 8:44:19 AM	Sample	K1605094-002	5
24	✓		024_PB.d	6/1/2016 8:48:23 AM	PB	KQ1605181-01	5
25			025_CCV.	6/1/2016 8:52:29 AM	CCV	CCV	
26	✓		026_CCB.	6/1/2016 8:56:35 AM	CCB	CCB	
27	✓		027_CCB.	6/1/2016 9:01:40 AM	CCB	CCB	
28			028_CCB.	6/1/2016 9:06:42 AM	CCB	CCB	
29			029LCCV.	6/1/2016 9:10:48 AM	LLCCV	LLCCVS	

Analyte

	Name	Mass	ISTD	Tune Mode
1	Be	9	6	No Gas
2	Ni	60	72	He
3	Ni	62	72	He
4	Cu	63	72	He

Analyte				
Name		Mass	ISTD	Tune Mode
5	Cu	65	72	He
6	Zn	66	72	He
7	As	75	72	He
8	Se	77	72	H2
9	Se	78	72	H2
10	Mo	95	115	He
11	Mo	97	115	He
12	Mo	98	115	He
13	Cd	111	115	He
14	Cd	114	115	He
15	Sb	121	115	He
16	Sb	123	115	He
17	[Pb]	206	175	He
18	[Pb]	207	175	He
19	Pb	208	175	He
20	Li	6		No Gas
21	Sc	45		No Gas
22	Sc	45		He
23	Sc	45		H2
24	Ge	72		No Gas
25	Ge	72		He
26	Ge	72		H2
27	In	115		He
28	Lu	175		He

US EPA Tune Check Sample Report

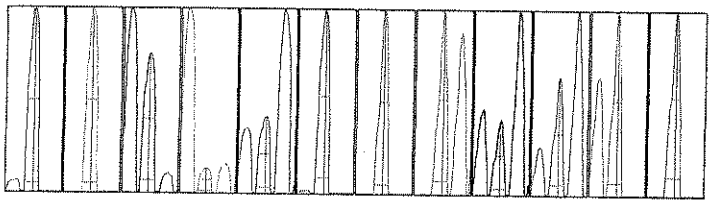
Batch Folder D:\Data\Experiments\060116A.b
Report Comment ALS Tune
Instrument Name G3281A JP13482848

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
7	31354	0.73	5.00	
9	14569	0.68	5.00	
24	92488	0.82	5.00	
25	12579	0.59	5.00	
26	15360	1.19	5.00	
59	149678	0.60	5.00	
115	243437	1.07	5.00	
206	62159	0.78	5.00	
207	54800	0.86	5.00	
208	131294	1.01	5.00	
209	201335	1.17	5.00	
238	267274	0.72	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
7	31333	31388	31716	31107	31226
9	14687	14497	14556	14453	14653
24	93586	92711	92544	92005	91593
25	12649	12513	12504	12662	12567
26	15596	15468	15340	15112	15287
59	151226	149659	149090	149155	149260
115	246988	244614	243741	240364	241479
206	62882	62319	62050	61969	61573
207	55393	54920	54856	54742	54086
208	133500	131376	130979	130596	130017
209	203832	203557	201291	198787	199208
238	269564	267907	268131	264635	266134

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
7	5379	7.00	6.9 - 7.1		0.739	0.900	
9	2478	8.95	8.9 - 9.1		0.775	0.900	
24	15550	23.90	23.9 - 24.1		0.797	0.900	
25	2110	24.90	24.9 - 25.1		0.743	0.900	
26	2478	25.95	25.9 - 26.1		0.743	0.900	
59	27258	58.95	58.9 - 59.1		0.751	0.900	
115	49920	114.95	114.9 - 115.1		0.763	0.900	
206	12622	206.00	205.9 - 206.1		0.775	0.900	
207	11096	206.95	206.9 - 207.1		0.776	0.900	
208	27159	207.95	207.9 - 208.1		0.774	0.900	
209	42125	209.00	208.9 - 209.1		0.780	0.900	
238	52590	237.95	237.9 - 238.1		0.801	0.900	

X% = 5 **Integration Time [sec] =** 0.1 **Acquisition Time [sec] =** 279 **Y Axis =** Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.57	L/min			
RF Matching	1.76	V	Option Gas	0.0	%			
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps			
S/C Temp	2	°C						

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	8.6	V			
Extract 2	-145.0	V	Cell Entrance	-30	V			
Omega Bias	-85	V	Cell Exit	-50	V			
Deflect	9.2	V						

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	false		3rd Gas Flow	0	%			
He Flow	0.0	mL/min	OctP Bias	-8.0	V			
H2 Flow	0.0	mL/min	OctP RF	200	V			
Energy Discrimination	5.0	V						

Calibration Blank Report

Sample Table

Sample Name	Blank
Data File Name	004CALB.d
Data Path Name	D:\Data\Experiments\060116A.b
Acq Date Time	2016-06-01T07:22:36-07:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	Tune Mode	CPS	%RSD
Be	9	No Gas	25	132.52
Ni	60	He	60	64.82
Ni	62	He	12	643.78
Cu	63	He	87	22.19
Cu	65	He	34	141.38
Zn	66	He	74	21.13
As	75	He	8	354.16
Se	77	H2	907	0.11
Se	78	H2	10	235.69
Mo	95	He	16	210.41
Mo	97	He	14	720.53
Mo	98	He	30	148.11
Cd	111	He	3	1666.67
Cd	114	He	11	273.90
Sb	121	He	102	20.59
Sb	123	He	111	20.31
[Pb]	206	He	256	5.14
[Pb]	207	He	211	6.00
Pb	208	He	1033	0.75

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD
Li	6	No Gas	571786	2.22
Ge	72	He	103880	0.92
Ge	72	H2	1175681	3.41
In	115	He	919519	0.80
Lu	175	He	2782759	1.70

Calibration Standard Report

Sample Table

Sample Name	2Sppb
Data File Name	005CALS.d
Data Path Name	D:\Data\Experiments\060116A.b
Acq Date Time	2016-06-01T07:27:12-07:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	004CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	CPS	%RSD
Be	9	No Gas	56517	0.00
Ni	60	He	32619	0.00
Ni	62	He	5194	0.05
Cu	63	He	96810	0.00
Cu	65	He	49363	0.00
Zn	66	He	12293	0.04
As	75	He	7584	0.02
Se	77	H2	5125	0.05
Se	78	H2	13263	0.02
Mo	95	He	48803	0.00
Mo	97	He	32073	0.00
Mo	98	He	85659	0.00
Cd	111	He	20812	0.00
Cd	114	He	53234	0.00
Sb	121	He	54651	0.00
Sb	123	He	44371	0.00
[Pb]	206	He	156350	0.00
[Pb]	207	He	139348	0.00
Pb	208	He	639331	0.00

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	567896	4.26	571786	99.32	30	120	
Ge	72	He	100866	0.39	103880	97.10	30	120	
Ge	72	H2	1147001	3.30	1175681	97.56	30	120	
In	115	He	904319	0.93	919519	98.35	30	120	
Lu	175	He	2786077	2.37	2782759	100.12	30	120	

Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICV
Data File Name	006_ICV.d
Data Path Name	D:\Data\Experiments\060116A.b
Acq Date Time	2016-06-01T07:31:48-07:00
Sample Type	ICV
Dilution	1
Comment	
ISTD Ref File Name	004CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	2.607	5.288	5765	2.86	2.5	104	
Ni	60	He	25.219	1.877	32890	0.94	25	101	
Ni	62	He	25.334	3.124	5260	1.15	25	101	
Cu	63	He	12.607	2.561	48835	0.54	12.5	101	
Cu	65	He	12.371	1.177	24435	1.03	12.5	99	
Zn	66	He	25.376	1.459	12476	2.81	25	102	
As	75	He	24.457	1.388	7417	0.78	25	98	
Se	77	H2	25.519	5.609	5168	1.83	25	102	
Se	78	H2	25.331	2.875	13328	0.50	25	101	
Mo	95	He	24.983	1.356	49249	0.77	25	100	
Mo	97	He	25.285	1.979	32762	2.64	25	101	
Mo	98	He	24.660	0.397	85329	1.06	25	99	
Cd	111	He	12.559	1.197	10558	0.62	12.5	100	
Cd	114	He	12.469	1.186	26817	0.67	12.5	100	
Sb	121	He	23.687	0.750	52291	0.63	25	95	
Sb	123	He	23.742	1.409	42556	1.29	25	95	
[Pb]	206	He	24.614	0.639	152606	0.86	25	98	
[Pb]	207	He	25.680	0.522	141921	1.28	25	103	
Pb	208	He	25.186	0.496	638549	0.98	25	101	

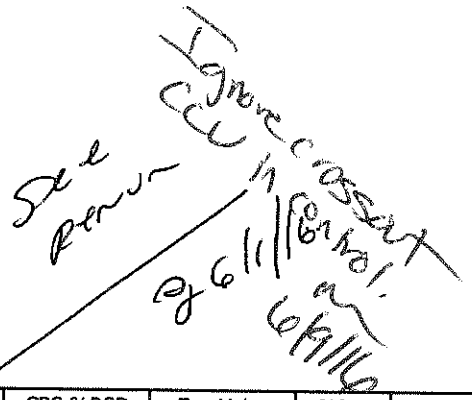
QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	553267	2.49	571786	96.76	30	120	
Ge	72	He	100845	2.18	103880	97.08	30	120	
Ge	72	H2	1137860	2.89	1175681	96.78	30	120	
In	115	He	913170	0.67	919519	99.31	30	120	
Lu	175	He	2761483	1.38	2782759	99.24	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	007_CCV.d
Data Path Name	D:\Data\Experiments\060116A.b
Acq Date Time	2016-06-01T07:36:23-07:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	004CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass



QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	24.967	5.105	46372	1.29	25	100	
Ni	60	He	27.376	11.657	30514	9.87	25	110	
Ni	62	He	27.863	11.036	4950	10.60	25	111	CCV Failed
Cu	63	He	27.189	12.659	89987	11.39	25	109	
Cu	65	He	27.236	11.763	45951	10.11	25	109	
Zn	66	He	27.374	13.133	11502	12.01	25	109	
As	75	He	27.385	11.647	7098	9.85	25	110	
Se	77	H2	25.831	1.621	5165	1.31	25	103	
Se	78	H2	25.589	2.367	13312	0.81	25	102	
Mo	95	He	27.526	13.479	46081	11.13	25	110	
Mo	97	He	27.811	12.205	30643	11.65	25	111	CCV Failed
Mo	98	He	27.319	12.695	80312	10.87	25	109	
Cd	111	He	27.241	12.795	19459	11.15	25	109	
Cd	114	He	27.146	13.291	49585	11.28	25	109	
Sb	121	He	27.369	12.077	51375	11.56	25	109	
Sb	123	He	27.480	11.483	41899	11.60	25	110	
[Pb]	206	He	27.288	11.951	145795	11.34	25	109	
[Pb]	207	He	27.674	11.821	131816	11.31	25	111	CCV Failed
Pb	208	He	27.433	12.130	599263	11.25	25	110	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	466630	3.77	571786	81.61	30	120	
Ge	72	He	86541	10.00	103880	83.31	30	120	
Ge	72	H2	1124858	2.37	1175681	95.68	30	120	
In	115	He	780264	12.07	919519	84.86	30	120	
Lu	175	He	2392935	12.95	2782759	85.99	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	008_CCV.d
Data Path Name	D:\Data\Experiments\060116A.b
Acq Date Time	2016-06-01T07:40:58-07:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	004CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

Lowers in central CCV. RL 6/9/16

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	25.271	4.208	46173	0.52	25	101	
Ni	60	He	26.432	8.624	28353	9.28	25	106	
Ni	62	He	27.032	11.732	4617	12.38	25	108	
Cu	63	He	26.500	9.599	84375	10.26	25	106	
Cu	65	He	26.136	10.344	42433	10.99	25	105	
Zn	66	He	26.168	12.224	10580	12.93	25	105	
As	75	He	26.605	10.032	6636	10.71	25	106	
Se	77	H2	25.396	2.006	5037	1.78	25	102	
Se	78	H2	25.612	3.195	13178	0.81	25	102	
Mo	95	He	25.882	8.663	41856	10.97	25	104	
Mo	97	He	26.273	7.781	27918	9.98	25	105	
Mo	98	He	25.959	8.201	73685	10.56	25	104	
Cd	111	He	26.269	8.166	18113	10.34	25	105	
Cd	114	He	26.088	7.763	46012	10.05	25	104	
Sb	121	He	26.166	7.925	47369	10.08	25	105	
Sb	123	He	26.300	7.925	38661	10.23	25	105	
[Pb]	206	He	26.001	6.765	135055	9.94	25	104	
[Pb]	207	He	25.788	6.525	119393	9.61	25	103	
Pb	208	He	25.925	6.677	550668	9.82	25	104	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	458939	3.79	571786	80.26	30	120	
Ge	72	He	82902	0.88	103880	79.81	30	120	
Ge	72	H2	1112867	3.27	1175681	94.66	30	120	
In	115	He	748196	2.52	919519	81.37	30	120	
Lu	175	He	2310514	3.30	2782759	83.03	30	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB
Data File Name	009_ICB.d
Data Path Name	D:\Data\Experiments\060116A.b
Acq Date Time	2016-06-01T07:45:35-07:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	004CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	-0.002	-114.6	22	16.4	0.04	
Ni	60	He	-0.012	-22.6	43	7.7	0.2	
Ni	62	He	0.047	52.7	22	22.9	0.2	
Cu	63	He	0.003	138.8	99	17.0	0.2	
Cu	65	He	0.004	117.6	42	22.8	0.2	
Zn	66	He	-0.073	-32.5	38	31.0	1	
As	75	He	0.004	596.0	9	86.8	0.25	
Se	77	H2	0.055	331.5	913	4.1	20	
Se	78	H2	0.006	51.3	14	15.2	0.5	
Mo	95	He	-0.001	-615.4	13	90.2	0.1	
Mo	97	He	-0.001	-602.1	13	50.0	0.1	
Mo	98	He	-0.001	-707.2	27	82.0	0.1	
Cd	111	He	0.002	64.9	5	22.2	0.04	
Cd	114	He	-0.001	-156.4	8	57.2	0.04	
Sb	121	He	0.001	1728.7	102	19.9	0.2	
Sb	123	He	-0.010	-97.8	91	19.7	0.05	
[Pb]	206	He	-0.007	-90.4	216	18.6	0.1	
[Pb]	207	He	-0.004	-158.1	193	17.5	0.1	
Pb	208	He	-0.007	-66.0	874	12.7	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	572946	2.63	571786	100.20	30	120	
Ge	72	He	103805	0.94	103880	99.93	30	120	
Ge	72	H2	1170016	2.38	1175681	99.52	30	120	
In	115	He	909773	1.10	919519	98.94	30	120	
Lu	175	He	2831957	1.24	2782759	101.77	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	010_CCB.d
Data Path Name	D:\Data\Experiments\060116A.b
Acq Date Time	2016-06-01T07:50:11-07:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	004CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	-0.002	-230.3	18	34.7	0.04	
Ni	60	He	-0.016	-67.9	37	39.6	0.2	
Ni	62	He	0.031	115.5	18	39.0	0.2	
Cu	63	He	0.008	51.1	113	13.5	0.2	
Cu	65	He	0.003	245.7	38	33.4	0.2	
Zn	66	He	-0.034	-94.3	54	30.2	1	
As	75	He	-0.004	-205.3	6	44.1	0.25	
Se	77	H2	0.194	150.7	910	6.3	20	
Se	78	H2	-0.008	-65.0	6	44.1	0.5	
Mo	95	He	-0.005	-20.6	6	34.7	0.1	
Mo	97	He	-0.008	-51.6	4	114.6	0.1	
Mo	98	He	-0.005	-35.1	13	43.3	0.1	
Cd	111	He	-0.001	-53.9	2	12.4	0.04	
Cd	114	He	-0.001	-84.0	9	20.3	0.04	
Sb	121	He	-0.005	-229.6	88	25.5	0.2	
Sb	123	He	-0.017	-58.3	78	21.7	0.05	
[Pb]	206	He	-0.014	-15.5	167	6.9	0.1	
[Pb]	207	He	-0.005	-96.2	179	15.8	0.1	
Pb	208	He	-0.008	-9.0	814	2.0	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	487553	11.11	571786	85.27	30	120	
Ge	72	He	98481	1.97	103880	94.80	30	120	
Ge	72	H2	1136269	1.43	1175681	96.65	30	120	
In	115	He	896917	2.00	919519	97.54	30	120	
Lu	175	He	2740716	1.05	2782759	98.49	30	120	

Low Level Initial Calibration Verification (LLICV) Report

Sample Table

Sample Name	LLICVS
Data File Name	011LICV.d
Data Path Name	D:\Data\Experiments\060116A.b
Acq Date Time	2016-06-01T07:54:46-07:00
Sample Type	LLICV
Dilution	1
Comment	
ISTD Ref File Name	004CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	0.044	10.231	123	8.97	0.04	109	
Ni	60	He	0.411	13.077	588	11.65	0.4	103	
Ni	62	He	0.532	14.475	121	13.58	0.4	133	
Cu	63	He	0.225	12.929	946	11.48	0.2	112	
Cu	65	He	0.234	7.416	490	7.36	0.2	117	
Zn	66	He	1.033	10.454	572	9.49	1	103	
As	75	He	1.002	3.764	308	3.20	1	100	
Se	77	H2	2.030	8.563	1222	3.93	2	102	
Se	78	H2	1.949	2.802	1037	0.92	2	97	
Mo	95	He	0.100	2.670	210	3.17	0.1	100	
Mo	97	He	0.070	7.639	103	6.45	0.1	70	
Mo	98	He	0.091	5.664	341	5.38	0.1	91	
Cd	111	He	0.041	21.218	37	19.16	0.04	103	
Cd	114	He	0.036	11.765	88	11.09	0.04	91	
Sb	121	He	0.108	8.553	335	5.27	0.1	108	
Sb	123	He	0.091	14.543	269	9.30	0.1	91	
[Pb]	206	He	0.084	9.049	770	6.54	0.1	84	
[Pb]	207	He	0.095	6.934	727	5.11	0.1	95	
Pb	208	He	0.092	6.367	3328	3.76	0.1	92	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	565108	1.44	571786	98.83	30	120	
Ge	72	He	99984	0.49	103880	96.25	30	120	
Ge	72	H2	1139767	2.02	1175681	96.95	30	120	
In	115	He	900494	0.80	919519	97.93	30	120	
Lu	175	He	2743057	1.05	2782759	98.57	30	120	

Sample Report

Sample Table

Sample Name	LRSTD
Data File Name	012SMPL.d
Data Path Name	D:\Data\Experiments\060116A.b
Acq Date Time	2016-06-01T07:59:23-07:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	004CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	518.690	5.78	1115459	0.05	
Ni	60	He	495.857	1.22	630515	0.08	
Ni	62	He	501.769	0.93	101546	0.49	
Cu	63	He	497.234	1.53	1878114	0.03	
Cu	65	He	484.590	0.81	933540	0.05	
Zn	66	He	491.791	0.81	234785	0.21	
As	75	He	489.190	0.79	144753	0.34	
Se	77	H2	482.393	3.30	83109	0.58	
Se	78	H2	481.002	3.24	256273	0.19	
Mo	95	He	492.985	1.13	932259	0.05	
Mo	97	He	496.925	0.81	617492	0.08	
Mo	98	He	511.539	2.44	1697740	0.03	
Cd	111	He	500.159	1.02	403379	0.12	
Cd	114	He	508.292	0.53	1048554	0.05	
Sb	121	He	468.921	0.67	991511	0.05	
Sb	123	He	470.889	0.37	807967	0.06	
[Pb]	206	He	505.517	2.08	3068828	0.02	
[Pb]	207	He	496.421	2.34	2686591	0.02	
Pb	208	He	492.599	1.39	12229339	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	540544	3.77	571786	94.54	30	120	
Ge	72	He	98473	1.07	103880	94.79	30	120	
Ge	72	H2	1153260	3.48	1175681	98.09	30	120	
In	115	He	876245	0.83	919519	95.29	30	120	
Lu	175	He	2708283	0.92	2782759	97.32	30	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA
Data File Name	013ICSA.d
Data Path Name	D:\Data\Experiments\060116A.b
Acq Date Time	2016-06-01T08:03:24-07:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	004CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	QC Flag
Be	9	No Gas	0.120	7.7	270	4.0	
Ni	60	He	0.496	8.5	673	8.2	
Ni	62	He	0.548	10.8	120	10.0	
Cu	63	He	0.600	1.4	2297	1.7	
Cu	65	He	0.594	4.3	1152	3.9	
Zn	66	He	0.357	24.3	236	16.9	
As	75	He	0.061	9.0	25	6.2	
Se	77	H2	0.917	13.7	994	2.4	
Se	78	H2	0.057	29.8	39	23.2	
Mo	95	He	51.829	1.1	93322	0.3	
Mo	97	He	51.834	0.1	61336	0.9	
Mo	98	He	51.776	0.3	163637	0.6	
Cd	111	He	0.092	5.7	73	6.3	
Cd	114	He	0.076	13.9	160	13.3	
Sb	121	He	0.320	8.7	736	7.4	
Sb	123	He	0.300	3.0	591	2.7	
[Pb]	206	He	0.093	5.8	801	4.0	
[Pb]	207	He	0.101	4.9	741	3.6	
Pb	208	He	0.094	4.3	3276	3.3	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	518177	3.12	571786	90.62	30	120	
Ge	72	He	96381	0.39	103880	92.78	30	120	
Ge	72	H2	1094947	2.28	1175681	93.13	30	120	
In	115	He	834231	0.81	919519	90.72	30	120	
Lu	175	He	2659552	0.27	2782759	95.57	30	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB
Data File Name	014ICSB.d
Data Path Name	D:\Data\Experiments\060116A.b
Acq Date Time	2016-06-01T08:07:29-07:00
Sample Type	ICSB
Dilution	1
Comment	
ISTD Ref File Name	004CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	0.044	17.105	112	11.13	-1	-4.4	
Ni	60	He	45.168	1.207	58211	0.82	50	90.3	
Ni	62	He	46.039	3.485	9445	3.09	50	92.1	
Cu	63	He	44.369	0.655	169787	0.78	50	88.7	
Cu	65	He	43.451	1.079	84789	0.87	50	86.9	
Zn	66	He	22.437	0.698	10915	1.04	25	89.7	
As	75	He	22.687	3.266	6804	2.91	25	90.7	
Se	77	H2	24.025	3.794	4898	2.74	25	96.1	
Se	78	H2	22.569	3.497	11823	2.75	25	90.3	
Mo	95	He	50.871	1.076	93553	0.37	50	101.7	
Mo	97	He	51.189	1.984	61859	1.05	50	102.4	
Mo	98	He	51.231	2.058	165351	0.65	50	102.5	
Cd	111	He	23.652	1.177	18551	0.60	25	94.6	
Cd	114	He	23.705	1.531	47557	0.49	25	94.8	
Sb	121	He	0.188	13.783	481	10.38	-1	-18.8	
Sb	123	He	0.184	7.931	410	5.86	-1	-18.4	
[Pb]	206	He	0.061	18.640	611	10.76	-1	-6.1	
[Pb]	207	He	0.070	3.445	581	2.02	-1	-7.0	
Pb	208	He	0.069	6.036	2709	4.18	-1	-6.9	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	512840	2.74	571786	89.69	30	120	
Ge	72	He	99711	0.39	103880	95.99	30	120	
Ge	72	H2	1133050	4.08	1175681	96.37	30	120	
In	115	He	852082	1.45	919519	92.67	30	120	
Lu	175	He	2685888	0.37	2782759	96.52	30	120	

Sample Report

Sample Table

Sample Name	K1605072-011
Data File Name	015SMPL.d
Data Path Name	D:\Data\Experiments\060116A.b
Acq Date Time	2016-06-01T08:11:33-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	004CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	3.596	3.42	7992	0.04	
Ni	60	He	21.190	1.02	28046	0.08	
Ni	62	He	21.554	4.86	4543	0.47	
Cu	63	He	31.071	1.12	121995	0.03	
Cu	65	He	30.219	0.68	60504	0.05	
Zn	66	He	149.708	2.01	74291	0.20	
As	75	He	11.072	0.98	3411	0.32	
Se	77	H2	2.158	7.33	1262	0.17	
Se	78	H2	0.369	3.36	207	0.18	
Mo	95	He	1.667	3.64	3270	0.05	
Mo	97	He	1.734	5.46	2239	0.08	
Mo	98	He	1.706	1.39	5877	0.03	
Cd	111	He	0.493	2.47	413	0.12	
Cd	114	He	0.611	1.10	1313	0.05	
Sb	121	He	0.552	5.28	1304	0.04	
Sb	123	He	0.533	9.38	1052	0.05	
[Pb]	206	He	86.972	2.02	558194	0.02	
[Pb]	207	He	82.198	2.18	470288	0.02	
Pb	208	He	84.573	2.58	2219471	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	556531	3.11	571786	97.33	30	120	
Ge	72	He	102286	0.09	103880	98.47	30	120	
Ge	72	H2	1156502	1.67	1175681	98.37	30	120	
In	115	He	904792	1.03	919519	98.40	30	120	
Lu	175	He	2862690	2.42	2782759	102.87	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	KQ1605181-02
Data File Name	016_PB.d
Data Path Name	D:\Data\Experiments\060116A.b
Acq Date Time	2016-06-01T08:15:39-07:00
Sample Type	LCS
Dilution	1
Comment	20
ISTD Ref File Name	004CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	5.246	3.715	12003	1.33	5	104.9	
Ni	60	He	50.505	0.609	69302	0.82	50	101.0	
Ni	62	He	51.456	0.819	11239	0.53	50	102.9	
Cu	63	He	25.336	2.145	103261	1.30	25	101.3	
Cu	65	He	24.981	1.267	51918	0.48	25	99.9	
Zn	66	He	50.616	1.259	26123	1.86	50	101.2	
As	75	He	50.455	1.687	16103	0.53	50	100.9	
Se	77	H2	49.567	2.609	8209	0.91	50	99.1	
Se	78	H2	49.214	3.691	23051	0.93	50	98.4	
Mo	95	He	49.815	1.072	102214	1.44	50	99.6	
Mo	97	He	50.300	1.118	67820	0.45	50	100.6	
Mo	98	He	49.754	1.357	179171	0.77	50	99.5	
Cd	111	He	5.085	0.808	4452	0.57	5	101.7	
Cd	114	He	5.142	0.456	11518	0.97	5	102.8	
Sb	121	He	49.119	1.227	112764	0.89	50	98.2	
Sb	123	He	48.768	1.030	90873	0.62	50	97.5	
[Pb]	206	He	49.762	0.331	319609	1.53	50	99.5	
[Pb]	207	He	51.714	0.295	296084	1.17	50	103.4	
Pb	208	He	50.849	0.473	1335490	1.03	50	101.7	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	573520	2.44	571786	100.30	30	120	
Ge	72	He	106175	1.31	103880	102.21	30	120	
Ge	72	H2	1013452	2.79	1175681	86.20	30	120	
In	115	He	950578	0.68	919519	103.38	30	120	
Lu	175	He	2862975	1.45	2782759	102.88	30	120	

Prep Blank (PB) Report

Sample Table

Sample Name	KQ1605181-01
Data File Name	017_LCS.d
Data Path Name	D:\Data\Experiments\060116A.b
Acq Date Time	2016-06-01T08:19:46-07:00
Sample Type	PB
Dilution	1
Comment	5
ISTD Ref File Name	004CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

See review 6/1/16

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	0.010	16.3	51	10.7	0.04	
Ni	60	He	-0.016	-35.9	40	22.0	0.2	
Ni	62	He	0.056	37.4	26	19.9	0.2	
Cu	63	He	0.008	95.7	123	24.0	0.2	
Cu	65	He	0.017	36.0	73	18.2	0.2	
Zn	66	He	-0.031	-132.1	62	35.7	1	
As	75	He	-0.010	-82.8	5	61.9	0.25	
Se	77	H2	-0.066	-44.8	921	4.3	2	
Se	78	H2	0.006	102.7	14	25.8	0.5	
Mo	95	He	0.012	48.2	42	27.7	0.1	
Mo	97	He	0.005	152.4	23	49.5	0.1	
Mo	98	He	0.011	32.3	76	18.4	0.1	
Cd	111	He	0.001	30.8	4	6.7	0.04	
Cd	114	He	0.000	-149.9	12	2.5	0.04	
Sb	121	He	0.058	22.4	249	12.1	0.1	
Sb	123	He	0.028	33.7	175	9.1	0.05	
[Pb]	206	He	0.003	258.5	298	17.4	0.1	
[Pb]	207	He	0.004	116.2	252	11.8	0.1	
Pb	208	He	0.005	22.7	1260	2.3	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	621241	3.49	571786	108.65	30	120	
Ge	72	He	109229	1.61	103880	105.15	30	120	
Ge	72	H2	1208352	4.50	1175681	102.78	30	120	
In	115	He	1000402	1.34	919519	108.80	30	120	
Lu	175	He	3014115	1.66	2782759	108.31	30	120	

All Reference Sample Report

Sample Table

Sample Name	K1605094-001
Data File Name	018_ARF.d
Data Path Name	D:\Data\Experiments\060116A.b
Acq Date Time	2016-06-01T08:23:52-07:00
Sample Type	AllRef
Dilution	1
Comment	5
ISTD Ref FileName	004CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	0.613	4.59	1424	0.04	
Ni	60	He	21.626	0.56	28203	0.08	
Ni	62	He	22.134	2.11	4596	0.48	
Cu	63	He	10.129	0.44	39240	0.03	
Cu	65	He	10.112	1.43	19969	0.05	
Zn	66	He	40.908	1.33	20055	0.20	
As	75	He	5.267	3.82	1602	0.33	
Se	77	H2	1.225	13.39	1088	0.11	
Se	78	H2	0.430	3.33	237	0.18	
Mo	95	He	0.327	7.91	667	0.05	
Mo	97	He	0.317	16.58	428	0.07	
Mo	98	He	0.292	4.93	1049	0.03	
Cd	111	He	0.305	8.37	262	0.12	
Cd	114	He	0.365	4.01	803	0.05	
Sb	121	He	0.166	7.19	471	0.04	
Sb	123	He	0.162	9.03	403	0.04	
[Pb]	206	He	6.925	2.30	44761	0.02	
[Pb]	207	He	6.577	2.75	37892	0.02	
Pb	208	He	6.703	2.08	177189	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	572873	3.83	571786	100.19	30	120	
Ge	72	He	100783	0.45	103880	97.02	30	120	
Ge	72	H2	1140600	2.97	1175681	97.02	30	120	
In	115	He	921159	1.31	919519	100.18	30	120	
Lu	175	He	2867312	1.94	2782759	103.04	30	120	

Sample Report

Sample Table

Sample Name	K1605094-001L
Data File Name	019SMPL.d
Data Path Name	D:\Data\Experiments\060116A.b
Acq Date Time	2016-06-01T08:27:57-07:00
Sample Type	Sample
Dilution	1
Comment	25
ISTD Ref FileName	004CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	0.127	0.56	300	0.04	
Ni	60	He	4.257	5.39	5748	0.07	
Ni	62	He	4.075	7.00	879	0.46	
Cu	63	He	2.019	2.31	8102	0.02	
Cu	65	He	2.004	3.20	4091	0.05	
Zn	66	He	8.024	5.66	4097	0.20	
As	75	He	1.041	1.82	331	0.31	
Se	77	H2	0.451	41.22	972	0.05	
Se	78	H2	0.111	35.29	69	0.16	
Mo	95	He	0.066	36.52	147	0.04	
Mo	97	He	0.061	8.43	94	0.07	
Mo	98	He	0.066	13.17	260	0.03	
Cd	111	He	0.059	5.36	53	0.11	
Cd	114	He	0.069	7.10	160	0.04	
Sb	121	He	0.055	21.13	223	0.02	
Sb	123	He	0.032	26.83	169	0.02	
[Pb]	206	He	1.389	3.75	9006	0.02	
[Pb]	207	He	1.325	1.72	7655	0.02	
Pb	208	He	1.369	1.13	36307	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	546177	3.28	571786	95.52	30	120	
Ge	72	He	103474	0.59	103880	99.61	30	120	
Ge	72	H2	1159355	3.64	1175681	98.61	30	120	
In	115	He	918779	1.71	919519	99.92	30	120	
Lu	175	He	2809766	0.29	2782759	100.97	30	120	

Post Digestion Spike Sample (PDS) Report

Sample Table

Sample Name	K1605094-001A
Data File Name	020_PDS.d
Data Path Name	D:\Data\Experiments\060116A.b
Acq Date Time	2016-06-01T08:32:03-07:00
Sample Type	PDS
Dilution	1
Comment	5
QC Ref File Name	018_ARF.d
ISTD Ref File Name	004CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Spk Amt	%Rec	QC Flag
Be	9	No Gas	51.357	3.067	100691	1.11	50	101	
Ni	60	He	69.006	1.079	78413	0.68	50	95	
Ni	62	He	69.577	3.205	12584	2.54	50	95	
Cu	63	He	58.001	1.359	195727	0.22	50	96	
Cu	65	He	57.474	1.148	98908	0.43	50	95	
Zn	66	He	89.054	1.366	38025	2.22	50	96	
As	75	He	55.118	1.058	14572	0.96	50	100	
Se	77	H2	57.357	9.338	9592	0.49	50	112	
Se	78	H2	55.994	8.096	26844	0.81	50	111	
Mo	95	He	49.491	1.977	83066	1.30	50	98	
Mo	97	He	50.305	1.883	55487	1.51	50	100	
Mo	98	He	49.620	0.526	146189	0.17	50	99	
Cd	111	He	49.467	1.594	35408	0.95	50	98	
Cd	114	He	50.373	1.058	92229	0.38	50	100	
Sb	121	He	48.097	0.512	90335	0.68	50	96	
Sb	123	He	48.314	1.236	73651	0.65	50	96	
[Pb]	206	He	55.209	0.542	299462	0.44	50	97	
[Pb]	207	He	54.733	1.437	264664	1.30	50	96	
Pb	208	He	55.016	0.787	1220357	0.68	50	97	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	492260	2.09	571786	86.09	30	120	
Ge	72	He	87948	1.16	103880	84.66	30	120	
Ge	72	H2	1041364	8.47	1175681	88.58	30	120	
In	115	He	777658	0.68	919519	84.57	30	120	
Lu	175	He	2418130	0.92	2782759	86.90	30	120	

Matrix Spike Sample (MS) Report

Sample Table

Sample Name	K1605094-001S
Data File Name	021_Spk.d
Data Path Name	D:\Data\Experiments\060116A.b
Acq Date Time	2016-06-01T08:36:10-07:00
Sample Type	Spike
Dilution	1
Comment	5
QC Ref File Name	018_ARF.d
ISTD Ref File Name	004CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Spk Amt	%Rec	QC Flag
Be	9	No Gas	22.079	2.223	48306	0.31	20	107	
Ni	60	He	219.748	1.406	292683	1.14	200	99	
Ni	62	He	218.439	1.429	46303	0.31	200	98	
Cu	63	He	107.668	0.836	426003	0.78	100	98	
Cu	65	He	107.270	2.057	216423	0.69	100	97	
Zn	66	He	244.147	2.194	122088	0.65	200	102	
As	75	He	202.951	2.034	62890	0.79	200	99	
Se	77	H2	198.346	3.811	34607	0.32	200	99	
Se	78	H2	196.066	2.642	104229	1.41	200	98	
Mo	95	He	186.472	0.370	370962	0.46	200	93	
Mo	97	He	188.170	0.231	245992	0.97	200	94	
Mo	98	He	186.560	0.349	651409	0.52	200	93	
Cd	111	He	19.834	1.092	16830	0.97	20	98	
Cd	114	He	20.077	1.388	43576	0.82	20	99	
Sb	121	He	96.367	0.824	214434	1.01	200	48	Flag
Sb	123	He	97.288	1.678	175678	1.40	200	49	Flag
[Pb]	206	He	197.079	0.722	1244294	0.52	200	95	
[Pb]	207	He	204.160	0.875	1149160	0.66	200	99	
Pb	208	He	202.565	2.634	5230145	2.57	200	98	

PDS ok

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	549081	1.92	571786	96.03	30	120	
Ge	72	He	103136	1.60	103880	99.28	30	120	
Ge	72	H2	1150415	3.45	1175681	97.85	30	120	
In	115	He	921761	0.75	919519	100.24	30	120	
Lu	175	He	2816138	0.26	2782759	101.20	30	120	

Matrix Spike Sample (MS) Report

Sample Table

Sample Name	K1605094-001SD
Data File Name	022_Spk.d
Data Path Name	D:\Data\Experiments\060116A.b
Acq Date Time	2016-06-01T08:40:14-07:00
Sample Type	Spike
Dilution	1
Comment	5
QC Ref File Name	018_ARF.d
ISTD Ref File Name	004CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Spk Amt	%Rec	QC Flag
Be	9	No Gas	20.439	2.740	41155	2.29	20	99	
Ni	60	He	216.599	1.256	244192	0.69	200	97	
Ni	62	He	220.755	0.931	39611	0.28	200	99	
Cu	63	He	106.019	0.639	355077	0.60	100	96	
Cu	65	He	105.115	0.752	179535	0.42	100	95	
Zn	66	He	238.824	0.632	101108	0.96	200	99	
As	75	He	199.321	0.600	52289	0.54	200	97	
Se	77	H2	230.927	14.503	34056	0.60	200	115	
Se	78	H2	230.871	15.699	103936	1.10	200	115	
Mo	95	He	181.970	0.859	308916	0.14	200	91	
Mo	97	He	182.730	1.526	203846	1.36	200	91	
Mo	98	He	182.395	1.355	543455	0.66	200	91	
Cd	111	He	19.186	1.066	13893	0.41	20	94	
Cd	114	He	19.256	0.994	35668	0.43	20	94	
Sb	121	He	91.758	0.703	174240	0.16	200	46	Flag
5b	123	He	92.177	0.549	142053	0.84	200	46	Flag
[Pb]	206	He	193.305	0.864	1044608	1.06	200	93	
[Pb]	207	He	201.321	0.308	969892	0.38	200	97	
Pb	208	He	197.796	0.601	4371156	0.87	200	96	

PDS
QC

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	505319	2.40	571786	88.38	30	120	
Ge	72	He	87297	1.13	103880	84.04	30	120	
Ge	72	H2	988655	14.58	1175681	84.09	30	120	
In	115	He	786604	0.72	919519	85.55	30	120	
Lu	175	He	2410311	0.46	2782759	86.62	30	120	

Sample Report

Sample Table

Sample Name	K1605094-002
Data File Name	023SMPL.d
Data Path Name	D:\Data\Experiments\060116A.b
Acq Date Time	2016-06-01T08:44:19-07:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	004CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	0.898	3.25	2066	0.04	
Ni	60	He	35.416	1.55	48959	0.07	
Ni	62	He	35.346	3.77	7778	0.45	
Cu	63	He	15.669	1.05	64355	0.02	
Cu	65	He	15.539	2.62	32536	0.05	
Zn	66	He	78.279	2.33	40639	0.19	
As	75	He	7.791	1.32	2511	0.31	
Se	77	H2	1.497	23.59	1182	0.13	
Se	78	H2	0.467	2.99	267	0.17	
Mo	95	He	0.486	3.51	1008	0.05	
Mo	97	He	0.485	4.52	666	0.07	
Mo	98	He	0.475	7.24	1732	0.03	
Cd	111	He	0.322	3.18	283	0.11	
Cd	114	He	0.389	3.18	878	0.04	
Sb	121	He	0.312	2.93	817	0.04	
Sb	123	He	0.315	9.28	698	0.05	
[Pb]	206	He	14.335	1.51	94471	0.02	
[Pb]	207	He	13.844	1.03	81335	0.02	
Pb	208	He	14.061	0.78	378986	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	570831	2.77	571786	99.83	30	120	
Ge	72	He	106923	0.71	103880	102.93	30	120	
Ge	72	H2	1188857	3.60	1175681	101.12	30	120	
In	115	He	946063	1.08	919519	102.89	30	120	
Lu	175	He	2931943	0.82	2782759	105.36	30	120	

Prep Blank (PB) Report

Sample Table

Sample Name	KQ1605181-01
Data File Name	024_PB.d
Data Path Name	D:\Data\Experiments\060116A.b
Acq Date Time	2016-06-01T08:48:23-07:00
Sample Type	PB
Dilution	1
Comment	5
ISTD Ref File Name	004CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	0.014	15.2	58	7.5	0.04	
Ni	60	He	0.087	28.4	182	19.6	0.2	
Ni	62	He	0.124	64.2	40	43.3	0.2	
Cu	63	He	0.059	18.3	333	13.1	0.2	
Cu	65	He	0.068	8.4	178	7.6	0.2	
Zn	66	He	0.564	13.4	370	10.4	1	
As	75	He	0.041	58.5	21	37.9	0.25	
Se	77	H2	0.180	139.9	955	4.6	2	
Se	78	H2	0.031	34.8	27	20.8	0.5	
Mo	95	He	0.027	40.3	72	30.7	0.1	
Mo	97	He	0.021	5.5	44	4.3	0.1	
Mo	98	He	0.032	33.7	148	26.7	0.1	
Cd	111	He	0.000	-259.6	3	27.0	0.04	
Cd	114	He	0.065	5.5	160	5.0	0.04	Flag
Sb	121	He	0.018	8.8	149	3.4	0.1	
Sb	123	He	-0.001	-1467.3	115	18.1	0.05	
[Pb]	206	He	0.052	9.5	616	5.7	0.1	
[Pb]	207	He	0.051	21.9	523	12.3	0.1	
Pb	208	He	0.052	13.8	2486	7.7	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	584257	1.07	571786	102.18	30	120	
Ge	72	He	107267	1.16	103880	103.26	30	120	
Ge	72	H2	1196015	0.76	1175681	101.73	30	120	
In	115	He	963180	0.92	919519	104.75	30	120	
Lu	175	He	2944302	0.71	2782759	105.81	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	025_CCV.d
Data Path Name	D:\Data\Experiments\060116A.b
Acq Date Time	2016-06-01T08:52:29-07:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	004CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	25.901	2.681	57662	1.00	25	104	
Ni	60	He	25.201	0.754	34111	1.26	25	101	
Ni	62	He	24.854	2.270	5356	1.93	25	99	
Cu	63	He	25.151	1.658	101031	1.02	25	101	
Cu	65	He	24.728	1.973	50650	1.64	25	99	
Zn	66	He	24.501	0.473	12500	0.22	25	98	
As	75	He	24.967	1.672	7857	1.42	25	100	
Se	77	H2	25.044	4.358	5366	1.50	25	100	
Se	78	H2	24.488	3.642	13580	0.74	25	98	
Mo	95	He	24.759	1.379	49976	0.34	25	99	
Mo	97	He	25.735	1.283	34139	0.74	25	103	
Mo	98	He	24.996	1.079	88560	0.36	25	100	
Cd	111	He	25.041	1.679	21553	0.63	25	100	
Cd	114	He	24.800	1.888	54599	0.98	25	99	
Sb	121	He	24.885	0.839	56248	0.72	25	100	
Sb	123	He	25.027	0.889	45929	0.51	25	100	
[Pb]	206	He	24.927	0.651	159541	0.66	25	100	
[Pb]	207	He	24.953	0.662	142370	1.08	25	100	
Pb	208	He	24.878	0.417	651143	0.34	25	100	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	558768	1.68	571786	97.72	30	120	
Ge	72	He	104637	0.69	103880	100.73	30	120	
Ge	72	H2	1199526	3.09	1175681	102.03	30	120	
In	115	He	935077	1.06	919519	101.69	30	120	
Lu	175	He	2850678	0.55	2782759	102.44	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	026_CCB.d
Data Path Name	D:\Data\Experiments\060116A.b
Acq Date Time	2016-06-01T08:56:35-07:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	004CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

6/1/16 WPU-6 Autosampler position

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	25.569	1.9	55023	5.4	0.04	CCB Failed
Ni	60	He	24.506	2.5	27973	1.4	0.2	CCB Failed
Ni	62	He	24.147	5.9	4387	4.3	0.2	CCB Failed
Cu	63	He	24.200	1.8	81990	0.9	0.2	CCB Failed
Cu	65	He	23.992	2.7	41444	1.6	0.2	CCB Failed
Zn	66	He	24.399	2.2	10498	0.5	1	CCB Failed
As	75	He	24.288	2.4	6447	2.1	0.25	CCB Failed
Se	77	H2	30.883	16.2	4810	4.4	20	CCB Failed
Se	78	H2	31.542	16.6	13116	7.2	0.5	CCB Failed
Mo	95	He	25.189	2.5	40880	2.6	0.1	CCB Failed
Mo	97	He	25.208	0.7	26887	1.4	0.1	CCB Failed
Mo	98	He	25.519	1.8	72687	1.1	0.1	CCB Failed
Cd	111	He	24.891	0.5	17226	0.2	0.04	CCB Failed
Cd	114	He	24.899	1.0	44076	0.5	0.04	CCB Failed
Sb	121	He	25.022	0.7	45471	0.1	0.2	CCB Failed
Sb	123	He	25.399	0.6	37474	0.4	0.05	CCB Failed
[Pb]	206	He	24.768	1.3	128759	0.8	0.1	CCB Failed
[Pb]	207	He	24.567	1.8	113856	1.8	0.1	CCB Failed
Pb	208	He	24.637	1.6	523776	1.3	0.1	CCB Failed

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	540377	6.88	571786	94.51	30	120	
Ge	72	He	88259	1.65	103880	84.96	30	120	
Ge	72	H2	909593	10.63	1175681	77.37	30	120	
In	115	He	751772	0.67	919519	81.76	30	120	
Lu	175	He	2315787	1.94	2782759	83.22	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	027_CCB.d
Data Path Name	D:\Data\Experiments\060116A.b
Acq Date Time	2016-06-01T09:01:40-07:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	004CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

By 6/1/16

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	26.168	3.0	57893	0.1	0.04	CCB Failed
Ni	60	He	24.659	1.1	33723	1.1	0.2	CCB Failed
Ni	62	He	24.893	2.8	5421	3.1	0.2	CCB Failed
Cu	63	He	24.677	1.1	100156	0.4	0.2	CCB Failed
Cu	65	He	24.592	1.9	50891	1.1	0.2	CCB Failed
Zn	66	He	25.299	1.0	13039	1.7	1	CCB Failed
As	75	He	25.025	2.4	7957	1.5	0.25	CCB Failed
Se	77	H2	24.040	3.7	5252	0.6	20	CCB Failed
Se	78	H2	24.396	3.6	13696	0.6	0.5	CCB Failed
Mo	95	He	25.326	1.2	50189	0.6	0.1	CCB Failed
Mo	97	He	25.585	1.7	33321	0.9	0.1	CCB Failed
Mo	98	He	25.483	1.9	88633	0.8	0.1	CCB Failed
Cd	111	He	25.303	1.4	21382	0.3	0.04	CCB Failed
Cd	114	He	25.014	0.9	54072	0.3	0.04	CCB Failed
Sb	121	He	25.352	1.3	56257	0.6	0.2	CCB Failed
Sb	123	He	25.130	1.9	45274	0.7	0.05	CCB Failed
[Pb]	206	He	24.621	1.0	155828	0.8	0.1	CCB Failed
[Pb]	207	He	24.754	1.9	139649	0.9	0.1	CCB Failed
Pb	208	He	24.785	1.4	641463	0.6	0.1	CCB Failed

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	55542B	2.89	571786	97.14	30	120	
Ge	72	He	105723	1.10	103880	101.77	30	120	
Ge	72	H2	1214365	3.28	1175681	103.29	30	120	
In	115	He	918053	1.19	919519	99.84	30	120	
Lu	175	He	2818978	1.09	2782759	101.30	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	028_CCB.d
Data Path Name	D:\Data\Experiments\060116A.b
Acq Date Time	2016-06-01T09:06:42-07:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	004CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	0.004	56.2	35	12.5	0.04	
Ni	60	He	0.001	2162.5	62	35.7	0.2	
Ni	62	He	0.065	61.8	27	33.1	0.2	
Cu	63	He	0.006	97.3	111	19.3	0.2	
Cu	65	He	0.011	83.1	58	32.8	0.2	
Zn	66	He	-0.044	-74.0	53	32.5	1	
As	75	He	-0.007	-115.9	6	44.4	0.25	
Se	77	H2	-0.106	-120.0	908	3.2	20	
Se	78	H2	-0.003	-50.0	9	13.3	0.5	
Mo	95	He	0.004	124.3	24	43.8	0.1	
Mo	97	He	0.001	570.0	16	32.7	0.1	
Mo	98	He	0.000	228.9	31	6.2	0.1	
Cd	111	He	0.002	121.0	5	40.1	0.04	
Cd	114	He	0.000	233.6	12	20.8	0.04	
Sb	121	He	-0.004	-109.7	93	10.8	0.2	
Sb	123	He	-0.014	-61.7	87	18.3	0.05	
[Pb]	206	He	-0.008	-28.1	208	7.9	0.1	
[Pb]	207	He	-0.007	-30.0	179	5.4	0.1	
Pb	208	He	-0.010	-23.3	790	8.7	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	564978	4.34	571786	98.81	30	120	
Ge	72	He	106069	0.86	103880	102.11	30	120	
Ge	72	H2	1201096	2.46	1175681	102.16	30	120	
In	115	He	928557	0.76	919519	100.98	30	120	
Lu	175	He	2842229	0.82	2782759	102.14	30	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLCCVS
Data File Name	029LCCV.d
Data Path Name	D:\Data\Experiments\060116A.b
Acq Date Time	2016-06-01T09:10:48-07:00
Sample Type	LLCCV
Dilution	1
Comment	
ISTD Ref File Name	004CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	0.047	3.037	131	3.91	0.04	118	
Ni	60	He	0.416	6.585	623	7.07	0.4	104	
Ni	62	He	0.475	11.031	114	8.90	0.4	119	
Cu	63	He	0.200	7.610	889	5.86	0.2	100	
Cu	65	He	0.223	16.382	492	14.53	0.2	112	
Zn	66	He	0.824	12.416	493	10.09	1	82	
As	75	He	0.900	13.502	291	12.15	1	90	
Se	77	H2	1.945	4.621	1245	3.48	2	97	
Se	78	H2	1.975	2.989	1083	1.23	2	99	
Mo	95	He	0.088	28.507	192	26.94	0.1	88	
Mo	97	He	0.112	3.279	162	2.37	0.1	112	
Mo	98	He	0.101	4.829	384	5.08	0.1	101	
Cd	111	He	0.039	8.875	37	8.87	0.04	98	
Cd	114	He	0.040	10.265	99	8.42	0.04	100	
Sb	121	He	0.111	15.737	351	11.05	0.1	111	
Sb	123	He	0.099	28.754	292	18.36	0.1	99	
[Pb]	206	He	0.084	11.075	791	7.80	0.1	84	
[Pb]	207	He	0.093	2.195	736	2.66	0.1	93	
Pb	208	He	0.086	4.701	3276	3.41	0.1	86	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	563163	1.91	571786	98.49	30	120	
Ge	72	He	104754	1.20	103880	100.84	30	120	
Ge	72	H2	1175392	3.43	1175681	99.98	30	120	
In	115	He	928462	0.73	919519	100.97	30	120	
Lu	175	He	2815772	1.45	2782759	101.19	30	120	

LABORATORY DATA CONSULTANTS, INC.
2701 Loker Ave. West, Suite 220, Carlsbad, CA 92010 Bus: 760-827-1100 Fax: 760-827-1099

ARCADIS U.S., Inc.
2929 Briarpark Drive, Suite 300
Houston, TX 77042

[redacted]

July 6, 2016

SUBJECT: Fort Bliss, Castner Range, Data Validation

[redacted]

Enclosed is the final validation report for the fraction listed below. This SDG was received on June 20, 2016. Attachment 1 is a summary of the samples that were reviewed for each analysis.

LDC Project #36566:

SDG #	Fraction:
K1605072	Metals

The data validation was performed under Level IV guidelines. The analyses were validated using the following documents, as applicable to each method:

- Final Quality Assurance Project Plan, Military Munitions Response Program Remedial Investigation, Closed Castner Firing Range, Fort Bliss, El Paso, Texas, February 2015
- U.S. Department of Defense Quality Systems Manual for Environmental Laboratories, 5.0, July 2013
- USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review, October 2004
- EPA SW 846, Third Edition, Test Methods for Evaluating Solid Waste, update 1, July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III, December 1996; update IIIA, April 1998; IIIB, November 2004; Update IV, February 2007; Update V, July 2014

Please feel free to contact us if you have any questions.

Sincerely,

[redacted]

HC

Attachment 1

EDD 90/10 ADR/IV

LDC #36566 (Arcadis-Houston, TX / Fort Bliss, Castner Range)

LDC	SDG#	DATE REC'D	(2) DATE DUE	(7) Metals (6020A)																															
Matrix:	Water/Sediment			W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S
A	K1605072	06/20/16	07/05/16	0	20																														
Total	T/PG			0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20

Shaded cells indicate Level IV validation (all other cells are Level III validation). These sample counts do not include MS/MSD, and DUPs

L:\Arcadis\Fort Bliss\36566ST.wpd

Data Validation Report
Fort Bliss, Castner Range

SDG: K1605072

Prepared for

Arcadis U.S., Inc.
2929 Briarpark Drive, Suite 300
Houston, TX 77042

Prepared by

Laboratory Data Consultants, Inc.
2701 Loker Ave West, Suite 220
Carlsbad, CA 92010

July 5, 2016

INTRODUCTION

This Data Validation Report (DVR) presents Level III and Level IV data validation results for samples collected during the May 2016 sampling period. Data validation was performed in accordance with the Final Quality Assurance Project Plan (QAPP), Military Munitions Response Program Remedial Investigation, Closed Castner Firing Range, Fort Bliss, El Paso, Texas (February 2015), the U.S. Department of Defense (DoD) Quality Systems Manual (QSM) for Environmental Laboratories, Version 5.0 (July 2013), and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines (CLPNFG) for Superfund Organic Methods Data Review (October 1999) and for Inorganic Superfund Data Review (October 2004). Where specific guidance is not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Metals by Environmental Protection Agency (EPA) SW 846 Method 6020A

The sample identification and methods of analyses performed on each sample is presented in Attachment 1. Overall data qualification summary is presented in Attachment 2. Level III Automated Data Review outliers are presented in Enclosure I. DVRs for samples on which Level 4 validation was performed are presented in Enclosure II.

All sample results were subjected to Level III data validation, which comprises an evaluation of quality control (QC) summary results for sample holding times, initial and continuing calibrations, laboratory blanks, initial and continuing calibration blanks (ICB/CCBs), surrogates, interference check (ICSA and ICSAB) samples, matrix spike/matrix spike duplicates (MS/MSD), serial dilution, laboratory control sample/laboratory control sample duplicates (LCS/LCSD), field duplicates and split samples. Approximately 10 percent of samples were subjected to Level 4 evaluation as indicated in Attachment 1, which comprised a review of the QC summary forms as well as the raw data, to confirm sample quantitation and identification.

Automated data review was performed on all QC summary results using the Automated Data Review (ADR) software program (LDC, 2013) with exception of the calibrations, interference check samples, ICB/CCBs and serial dilution, which were validated manually. Quality assurance (QA)/QC criteria specified in the QAPP, DoD QSM and CLPNFGs were incorporated with the program's reference library to assess compliance with project requirements.

I. Sample Receipt & Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

II. Initial Calibration and Initial Calibration Verification

All criteria for the initial calibration and initial calibration verifications of the method were met.

III. Continuing Calibration

All criteria for the continuing calibration verifications of the method were met.

IV. Laboratory Blanks

Laboratory blanks were performed as required by the method. No contaminant concentrations were detected in the laboratory blanks with the exception of one blank for nickel. The associated sample results were not detected or were significantly greater than the concentrations found in the blanks, therefore no data were qualified. The details are presented in Enclosure I.

No contaminant concentrations were detected in the initial or continuing calibration blanks with the following exceptions:

SDG/ Method	Laboratory Blank ID	Analyte	Maximum Concentration	Associated Samples
K1605072/ 6020A	ICB/CCB	Antimony Beryllium	0.023 ug/L 0.012 ug/L	FTBL-SED-09-0-6-050616 FTBL-SED-09-12-18-050616 FTBL-SED-08-0-6-050616 FTBL-SED-08-12-18-050616
K1605072/ 6020A	ICB/CCB	Antimony	0.023 ug/L	FTBL-SED-07-0-6-050616 FTBL-SED-06-0-6-050616 FTBL-SED-10-0-6-050616 FTBL-SED-10-12-18-050616 FTBL-SED-26-0-6-050916 FTBL-SED-27-0-6-050916 FTBL-SED-29-0-6-050916 FTBL-SED-30-0-6-050916 FD050916 FTBL-SED-15-0-6-050916 FTBL-SED-14-0-6-050916 FTBL-SED-21-0-6-051016 FTBL-SED-22-0-6-051016 FTBL-SED-23-0-6-051016 FTBL-SED-24-0-6-051016

Sample concentrations were compared to concentrations detected in the initial or continuing calibration blanks. The sample concentrations were not detected or were significantly greater than the concentrations found in the associated blanks.

V. Field Blanks

No field blanks were identified in these SDGs.

VI. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were performed on an associated project sample. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the exception of antimony and zinc in one MS/MSD pair. No data were qualified since the pots-digestion spike %R or serial dilution %D was within QC limits. The details are provided in Enclosure I.

VIII. Duplicate Sample Analysis

The laboratory has indicated that there were no duplicate (DUP) analyses specified for the samples in this SDG, and therefore laboratory duplicate analyses were not performed for this SDG.

IX. Serial Dilution

Serial dilution analysis was performed on an associated project sample. The percent differences (%D) were within QC limits.

X. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

XI. Field Duplicates/Split Samples

One field duplicate pair was collected and analyzed for metals. All RPDs were within QC limits. The field duplicate result comparisons are provided in Enclosure I.

Samples FTBL-SED-29-0-6-050916 and FTBL-SED-29-6-050916-QA were identified as split samples. No metals were detected in any of the split samples with the following exceptions:

Analyte	Concentration (mg/Kg)		RPD (≤50)	Qualifiers
	FTBL-SED-29-0-6-050916 (SDG: K1605072)	FTBL-SED-29-6-050916-QA (SDG: FA33973)		
Antimony	0.125	2.0U	176	J (all detects) UJ (all non-detects)
Arsenic	4.20	4.9	15	
Beryllium	1.56	1.6	3	

Analyte	Concentration (mg/Kg)		RPD (≤50)	Qualifiers
	FTBL-SED-29-0-6-050916 (SDG: K1605072)	FTBL-SED-29-6-050916-QA (SDG: FA33973)		
Copper	10.7	13.0	19	
Lead	11.7	15.1	25	
Nickel	6.69	8.9	28	
Zinc	44.4	57.8	26	

XII. Compound Quantitation

The laboratory reporting limits were evaluated. All laboratory reporting limits met the specified requirements.

XIII. Overall Assessment of Data

The analysis was conducted within all specifications of the methods. No results were rejected in these SDGs.

Due to split sample RPD, data were qualified as estimated in one sample.

The quality control criteria reviewed, as discussed above, were met and are considered acceptable. Sample results that were found to be estimated (J) are usable for limited purposes only. Based upon the data validation, all other results are considered valid and usable for all purposes.

Data flags are summarized and are presented as Attachment 2.

Attachment 1

Sample Cross Reference

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
06-May-2016	FTBL-SED-09-0-6-050616	K1605072-001	N	EPA 3050B	6020A	IV
06-May-2016	FTBL-SED-09-0-6-050616MS	K1605072-001MS	MS	EPA 3050B	6020A	IV
06-May-2016	FTBL-SED-09-0-6-050616MSD	K1605072-001SD	MSD	EPA 3050B	6020A	IV
06-May-2016	FTBL-SED-09-12-18-050616	K1605072-002	N	EPA 3050B	6020A	III
06-May-2016	FTBL-SED-08-0-6-050616	K1605072-003	N	EPA 3050B	6020A	III
06-May-2016	FTBL-SED-08-12-18-050616	K1605072-004	N	EPA 3050B	6020A	III
06-May-2016	FTBL-SED-07-0-6-050616	K1605072-005	N	EPA 3050B	6020A	III
06-May-2016	FTBL-SED-06-0-6-050616	K1605072-006	N	EPA 3050B	6020A	III
06-May-2016	FTBL-SED-10-0-6-050616	K1605072-007	N	EPA 3050B	6020A	III
06-May-2016	FTBL-SED-10-12-18-050616	K1605072-008	N	EPA 3050B	6020A	III
09-May-2016	FD050916	K1605072-014	FD	EPA 3050B	6020A	III
09-May-2016	FTBL-SED-26-0-6-050916	K1605072-009	N	EPA 3050B	6020A	III
09-May-2016	FTBL-SED-27-0-6-050916	K1605072-010	N	EPA 3050B	6020A	III
09-May-2016	FTBL-SED-28-0-6-050916	K1605072-011	N	EPA 3050B	6020A	III
09-May-2016	FTBL-SED-29-0-6-050916	K1605072-012	N	EPA 3050B	6020A	IV
09-May-2016	FTBL-SED-30-0-6-050916	K1605072-013	N	EPA 3050B	6020A	III
09-May-2016	FTBL-SED-15-0-6-050916	K1605072-015	N	EPA 3050B	6020A	III
09-May-2016	FTBL-SED-14-0-6-050916	K1605072-016	N	EPA 3050B	6020A	III
10-May-2016	FTBL-SED-21-0-6-051016	K1605072-017	N	EPA 3050B	6020A	III
10-May-2016	FTBL-SED-22-0-6-051016	K1605072-018	N	EPA 3050B	6020A	III
10-May-2016	FTBL-SED-23-0-6-051016	K1605072-019	N	EPA 3050B	6020A	III
10-May-2016	FTBL-SED-24-0-6-051016	K1605072-020	N	EPA 3050B	6020A	III

III = Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike* *DUP = Lab Duplicate*
IV = Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment 2
Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: K1605072 **Laboratory:** ALS_K

EDD Filename: K1605072_SEDD2A_rev **eQAPP Name:** Arcadis_FtBliss_ALS_160627

Method Category: METALS

Method: 6020A ***Matrix:*** Soil

Sample ID: FTBL-SED-29-0-6-050916 ***Collected:*** 5/9/2016 10:30:00 AM ***Analysis Type:*** Initial ***Dilution:*** 5.0

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.125	J	0.020	LOD	0.039	LOQ	mg/Kg	J	Fd

* denotes a non-reportable result

Project Name and Number: 06261038.0000 - Castner Range Fort Bliss, TX

Data Qualifier Summary

Lab Reporting Batch ID: K1605072 **Laboratory: ALS_K**

EDD Filename: K1605072_SEDD2A_rev **eQAPP Name: Arcadis_FtBliss_ALS_160627**

Reason Code Legend

Reason Code	*Description*
Fd	Field Duplicate Precision
Mb	Method Blank Contamination
Ms	Matrix Spike Lower Estimation

* denotes a non-reportable result

Project Name and Number: 06261038.0000 - Castner Range Fort Bliss, TX

Enclosure I

Level III ADR Outliers

(Including Manual Review Outliers)

Quality Control
Outlier Reports

K1605072

Method Blank Outlier Report

Lab Reporting Batch ID: K1605072 **Laboratory: ALS_K**

EDD Filename: K1605072_SEDD2A **eQAPP Name: Arcadis_FtBliss_ALS_160627**

Method: **6020A**
Matrix: **Soil**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
KQ1605187-01	5/26/2016 12:42:00 PM	NICKEL	0.04 mg/Kg	FD050916 FTBL-SED-06-0-6-050616 FTBL-SED-07-0-6-050616 FTBL-SED-08-0-6-050616 FTBL-SED-08-12-18-050616 FTBL-SED-09-0-6-050616 FTBL-SED-09-12-18-050616 FTBL-SED-10-0-6-050616 FTBL-SED-10-12-18-050616 FTBL-SED-14-0-6-050916 FTBL-SED-15-0-6-050916 FTBL-SED-21-0-6-051016 FTBL-SED-22-0-6-051016 FTBL-SED-23-0-6-051016 FTBL-SED-24-0-6-051016 FTBL-SED-26-0-6-050916 FTBL-SED-27-0-6-050916 FTBL-SED-28-0-6-050916 FTBL-SED-29-0-6-050916 FTBL-SED-30-0-6-050916

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: K1605072 **Laboratory: ALS_K**

EDD Filename: K1605072_SEDD2A_rev **eQAPP Name: Arcadis_FtBliss_ALS_160627**

Method: **6020A**
Matrix: **Soil**

QC Sample ID (Associated Samples)	*Compound*	*MS %R*	*MSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
FTBL-SED-09-0-6-050616MS (Dry) FTBL-SED-09-0-6-050616MSD (Dry) (FTBL-SED-09-0-6-050616)	ANTIMONY ZINC	56 -	56 77	72.00-124.00 82.00-119.00	- -	ANTIMONY ZINC	No Qual, Serial Dilution and Post Spike within QC

Project Name and Number: 06261038.0000 - Castner Range Fort Bliss, TX

Field Duplicate RPD Report

Lab Reporting Batch ID: K1605072 **Laboratory: ALS_K**

EDD Filename: K1605072_SEDD2A **eQAPP Name: Arcadis_FtBliss_ALS_160627**

Method: 6020A
Matrix: Soil

Analyte	*Concentration (mg/Kg)*		*Sample RPD*	*eQAPP RPD*	*Flag*
	FTBL-SED-29-0-6-050916	FD050916 (Dry)			
ANTIMONY	0.125	0.185	39	50.00	
ARSENIC	4.20	5.21	21	50.00	
BERYLLIUM	1.56	2.00	25	50.00	
COPPER	10.7	12.3	14	50.00	No Qualifiers Applied
LEAD	11.7	13.2	12	50.00	
NICKEL	6.69	8.33	22	50.00	
ZINC	44.4	54.3	20	50.00	

Project Name and Number: 06261038.0000 - Castner Range Fort Bliss, TX

LDC #: 36566A4a
SDG #: K1605072
Laboratory: ALS Environmental

VALIDATION COMPLETENESS WORKSHEET
ADR/V

Date: 6/23/16

[redacted]

METHOD: Metals (EPA SW 846 Method 6020A)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A / A	
II.	ICP/MS Tune	A	
III.	Instrument Calibration	A	
IV.	ICP Interference Check Sample (ICS) Analysis	A	
V.	Laboratory Blanks	SW	
VI.	Field Blanks	N	
VII.	Matrix Spike/Matrix Spike Duplicates	SW	
VIII.	Duplicate sample analysis	N	
IX.	ICP Serial Dilution	A	
X.	Laboratory control samples	A	LCS (from FA33973)
XI.	Field Duplicates	SW	SPL=C12, FTBL-SED-29-0-6-050916-QA)
XII.	Internal Standard (ICP-MS)	A	
XIII.	Sample Result Verification	A	
XIV	Overall Assessment of Data	A	

Note: A = Acceptable; ND = No compounds detected; D = Duplicate; SB=Source blank
N = Not provided/applicable; R = Rinsate; TB = Trip blank; OTHER:
SW = See worksheet; FB = Field blank; EB = Equipment blank

	Client ID	Lab ID	Matrix	Date
1	FTBL-SED-09-0-6-050616**	K1605072-001**	Sediment	05/06/16
2	FTBL-SED-09-12-18-050616	K1605072-002	Sediment	05/06/16
3	FTBL-SED-08-0-6-050616	K1605072-003	Sediment	05/06/16
4	FTBL-SED-08-12-18-050616	K1605072-004	Sediment	05/06/16
5	FTBL-SED-07-0-6-050616	K1605072-005	Sediment	05/06/16
6	FTBL-SED-06-0-6-050616	K1605072-006	Sediment	05/06/16
7	FTBL-SED-10-0-6-050616	K1605072-007	Sediment	05/06/16
8	FTBL-SED-10-12-18-050616	K1605072-008	Sediment	05/06/16
9	FTBL-SED-26-0-6-050916	K1605072-009	Sediment	05/09/16
10	FTBL-SED-27-0-6-050916	K1605072-010	Sediment	05/09/16
11	FTBL-SED-28-0-6-050916	K1605072-011	Sediment	05/09/16
12	FTBL-SED-29-0-6-050916**	K1605072-012**	Sediment	05/09/16
13	FTBL-SED-30-0-6-050916	K1605072-013	Sediment	05/09/16
14	FD050916	K1605072-014	Sediment	05/09/16

LDC #: 36566A4a

SDG #: K1605072

Laboratory: ALS Environmental

VALIDATION COMPLETENESS WORKSHEET

ADR IV

Date: 9/23/16

[redacted]

METHOD: Metals (EPA SW 846 Method 6020A)

	Client ID	Lab ID	Matrix	Date
15	FTBL-SED-15-0-6-050916	K1605072-015	Sediment	05/09/16
16	FTBL-SED-14-0-6-050916	K1605072-016	Sediment	05/09/16
17	FTBL-SED-21-0-6-051016	K1605072-017	Sediment	05/10/16
18	FTBL-SED-22-0-6-051016	K1605072-018	Sediment	05/10/16
19	FTBL-SED-23-0-6-051016	K1605072-019	Sediment	05/10/16
20	FTBL-SED-24-0-6-051016	K1605072-020	Sediment	05/10/16
21	FTBL-SED-09-0-6-050616MS	K1605072-001MS	Sediment	05/06/16
22	FTBL-SED-09-0-6-050616MSD	K1605072-001MSD	Sediment	05/06/16
23				
24				
25				
26				
27				

Notes:

LDC #: 36556A4b

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

[redacted]

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000) Soil preparation factor applied: 100x x 5xdil

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: All

				Sample Identification										
Analyte	Maximum PB[a] (mg/Kg)	Maximum ICB/CCB[a] (ug/L)	Action Level	No qualifiers										
Ni	0.04		0.2											

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 1-4

				Sample Identification										
Analyte	Maximum PB[a] (mg/Kg)	Maximum ICB/CCB[a] (ug/L)	Action Level	No qualifiers										
Sb		0.023	0.0575											
Be		0.012	0.03											

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 5-10, 12-20

				Sample Identification										
Analyte	Maximum PB[a] (mg/Kg)	Maximum ICB/CCB[a] (ug/L)	Action Level	No qualifiers										
Sb		0.023	0.0575											

Samples with analyte concentrations within five times the associated ICB, CCB or PB concentration are listed above with the identifications from the Validation Completeness Worksheet. These sample results were qualified as not detected, "U".

Note : a - The listed analyte concentration is the highest ICB, CCB, or PB detected in the analysis of each element.

LDC#: 36408A4b

VALIDATION FINDINGS WORKSHEET

Page: 1 of 1

Split Duplicates

[redacted]

METHOD: Metals (EPA Method 6010B/7000)

Analyte	Concentration (mg/Kg)		RPD (≤50)	Qualifiers (Parents Only)
	FTBL-SED-29-0-6-050916	FTBL-SED-29-D-6-050916-QA*		
Antimony	0.125	2.0U	176	~~NQ (<LOQ)~~ J/UJ/A
Arsenic	4.20	4.9	15	
Beryllium	1.56	1.6	3	
Copper	10.7	13.0	19	
Lead	11.7	15.1	25	
Nickel	6.69	8.9	28	
Zinc	44.4	57.8	26	

* from SDG FA33973

\\LDCFILESERVER\Validation\FIELD DUPLICATES\FD_inorganic\36408A4b.wpd

Enclosure II

Level IV Data Validation Reports

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Fort Bliss, Castner Range

LDC Report Date: June 30, 2016

Parameters: Metals

Validation Level: Level IV

Laboratory: ALS Environmental

Sample Delivery Group (SDG): K1605072

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
FTBL-SED-09-0-6-050616	K1605072-001	Sediment	05/06/16
FTBL-SED-29-0-6-050916	K1605072-012	Sediment	05/09/16
FTBL-SED-09-0-6-050616MS	K1605072-001MS	Sediment	05/06/16
FTBL-SED-09-0-6-050616MSD	K1605072-001MSD	Sediment	05/06/16

Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Final Quality Assurance Project Plan, Military Munitions Response Program Remedial Investigation, Closed Castner Firing Range, Fort Bliss, El Paso, Texas (February 2015), the U.S. Department of Defense (DoD) Quality Systems Manual (QSM) for Environmental Laboratories, Version 5.0 (July 2013), and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines (CLPNFG) for Inorganic Superfund Data Review (October 2004). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Antimony, Arsenic, Beryllium, Copper, Lead, Nickel, and Zinc by Environmental Protection Agency (EPA) SW 846 Method 6020A

All sample results were subjected to Level IV evaluation, which is comprised of the quality control (QC) summary forms as well as the raw data, to confirm sample quantitation and identification.

The following are definitions of the data qualifiers utilized during data validation:

J (Estimated): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated due to non-conformances discovered during data validation.

U (Non-detected): The compound or analyte was analyzed for and positively identified by the laboratory; however the compound or analyte should be considered non-detected at the reported concentration due to the presence of contaminants detected in the associated blank(s).

UJ (Non-detected estimated): The compound or analyte was reported as not detected by the laboratory; however the reported quantitation/detection limit is estimated due to non-conformances discovered during data validation.

R (Rejected): The sample results were rejected due to gross non-conformances discovered during data validation. Data qualified as rejected is not usable.

NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected compound or analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

I. Sample Receipt and Technical Holding Times

All samples were received in good condition.

All technical holding time requirements were met.

II. ICPMS Tune

The mass calibration was within 0.1 AMU and the percent relative standard deviation (%RSD) was less than or equal to 5%.

III. Instrument Calibration

Initial and continuing calibrations were performed as required by the method.

The initial calibration verification (ICV) and continuing calibration verification (CCV) standards were within QC limits.

IV. ICP Interference Check Sample Analysis

The frequency of interference check sample (ICS) analysis was met. All criteria were within QC limits.

V. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks with the following exceptions:

Blank ID	Analyte	Maximum Concentration	Associated Samples
PB (prep blank)	Nickel	0.04 mg/Kg	All samples in SDG K1605072
ICB/CCB	Antimony Beryllium	0.023 ug/L 0.012 ug/L	FTBL-SED-09-0-6-050616
ICB/CCB	Antimony	0.023 ug/L	FTBL-SED-29-0-6-050916

Data qualification by the laboratory blanks was based on the maximum contaminant concentration in the laboratory blanks in the analysis of each analyte. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated laboratory blanks.

VI. Field Blanks

No field blanks were identified in this SDG.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on an associated project sample. No data were qualified for Antimony and Zinc percent recoveries (%R) outside QC limits for FTBL-SED-09-0-6-050616MS/MSD since the post-digestion spike %R or since the serial dilution %D was within QC limits.

VIII. Duplicate Sample Analysis

The laboratory has indicated that there were no duplicate (DUP) analyses specified for the samples in this SDG, and therefore duplicate analyses were not performed for this SDG.

IX. Serial Dilution

Serial dilution analysis was performed on an associated project sample. The percent differences (%D) were within QC limits.

X. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

XI. Field Duplicates

No field duplicates were identified in this SDG.

Samples FTBL-SED-29-0-6-050916 and FTBL-SED-29-0-6-050916-QA (from SDG FA33973) were identified as split samples. No results were detected in any of the samples with the following exceptions:

Analyte	Concentration (mg/Kg)		RPD (Limits)	Flag	A or P
	FTBL-SED-29-0-6-050916	FTBL-SED-29-0-6-050916-QA			
Antimony	0.125	2.0U	176 (≤50)	J (all detects) UJ (all non-detects)	A
Arsenic	4.20	4.9	15 (≤50)	-	-
Beryllium	1.56	1.6	3 (≤50)	-	-
Copper	10.7	13.0	19 (≤50)	-	-
Lead	11.7	15.1	25 (≤50)	-	-
Nickel	6.69	8.9	28 (≤50)	-	-

Analyte	Concentration (mg/Kg)		RPD (Limits)	Flag	A or P
	FTBL-SED-29-0-6-050916	FTBL-SED-29-0-6-050916-QA			
Zinc	44.4	57.8	26 (≤50)	-	-

XII. Internal Standards (ICP-MS)

All internal standard percent recoveries (%R) were within QC limits.

XIII. Sample Result Verification

All sample result verifications were acceptable.

XIV. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Due to split samples RPD, data were qualified as estimated in one sample.

The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable. Sample results that were found to be estimated (J) are usable for limited purposes only. Based upon the data validation all other results are considered valid and usable for all purposes.

Fort Bliss, Castner Range
Metals - Data Qualification Summary - SDG K1605072

Sample	Analyte	Flag	A or P	Reason
FTBL-SED-29-0-6-050916	Antimony	J (all detects) UJ (all non-detects)	A	Split samples (RPD)

Fort Bliss, Castner Range
Metals - Laboratory Blank Data Qualification Summary - SDG K1605072

No Sample Data Qualified in this SDG

Fort Bliss, Castner Range
Metals - Field Blank Data Qualification Summary - SDG K1605072

No Sample Data Qualified in this SDG

LDC #: 36566A4a
SDG #: K1605072
Laboratory: ALS Environmental

VALIDATION COMPLETENESS WORKSHEET

~~ADR~~/IV

Date: 6/23/16
Page: 1 of 2
[redacted]

METHOD: Metals (EPA SW 846 Method 6020A)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A / A	
II.	ICP/MS Tune	A	
III.	Instrument Calibration	A	
IV.	ICP Interference Check Sample (ICS) Analysis	A	
V.	Laboratory Blanks	SW	
VI.	Field Blanks	N	
VII.	Matrix Spike/Matrix Spike Duplicates	SW	
VIII.	Duplicate sample analysis	N	
IX.	ICP Serial Dilution	A	
X.	Laboratory control samples	A	LCS (from FA33973)
XI.	Field Duplicates	SW	SPLIT=(12, FTBL-SED-29-06-050916-QA)
XII.	Internal Standard (ICP-MS)	A	
XIII.	Sample Result Verification	A	
XIV.	Overall Assessment of Data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID	Lab ID	Matrix	Date
1	FTBL-SED-09-0-6-050616**	K1605072-001**	Sediment	05/06/16
2	~~FTBL-SED-09-12-18-050616~~	K1605072-002	Sediment	~~05/06/16~~
3	FTBL-SED-08-0-6-050616	K1605072-003	Sediment	05/06/16
4	FTBL-SED-08-12-18-050616	K1605072-004	Sediment	05/06/16
5	FTBL-SED-07-0-6-050616	K1605072-005	Sediment	05/06/16
6	FTBL-SED-06-0-6-050616	K1605072-006	Sediment	05/06/16
7	FTBL-SED-10-0-6-050616	K1605072-007	Sediment	05/06/16
8	FTBL-SED-10-12-18-050616	K1605072-008	Sediment	05/06/16
9	FTBL-SED-26-0-6-050916	K1605072-009	Sediment	05/09/16
10	FTBL-SED-27-0-6-050916	K1605072-010	Sediment	05/09/16
11	~~FTBL-SED-28-0-6-050916~~	~~K1605072-011~~	Sediment	~~05/09/16~~
12	FTBL-SED-29-0-6-050916**	K1605072-012**	Sediment	05/09/16
13	~~FTBL-SED-30-0-6-050916~~	K1605072-013	Sediment	~~05/09/16~~
14	FD050916	~~K1605072-014~~	Sediment	05/09/16

LDC #: 36566A4a

VALIDATION COMPLETENESS WORKSHEET

ADR/IV

Date: 9/23/16

SDG #: K1605072

Page: 2 of 7

Laboratory: ALS Environmental

[redacted]

METHOD: Metals (EPA SW 846 Method 6020A)

	Client ID	Lab ID	Matrix	Date
15	FTBL-SED-15-0-6-050916	K1605072-015	Sediment	05/09/16
16	FTBL-SED-14-0-6-050916	K1605072-016	Sediment	05/09/16
17	FTBL-SED-21-0-6-051016	K1605072-017	Sediment	05/10/16
18	FTBL-SED-22-0-6-051016	K1605072-018	Sediment	05/10/16
19	FTBL-SED-23-0-6-051016	K1605072-019	Sediment	05/10/16
20	FTBL-SED-24-0-6-051016	K1605072-020	Sediment	05/10/16
21	FTBL-SED-09-0-6-050616MS	K1605072-001MS	Sediment	05/06/16
22	FTBL-SED-09-0-6-050616MSD	K1605072-001MSD	Sediment	05/06/16
23				
24				
25				
26				
27				

Notes:

LDC #: 36566A4b

VALIDATION FINDINGS CHECKLIST

[redacted]

Method: Metals (EPA SW 846 Method 6010/6020/7000)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. ICP/MS Tune				
Were all isotopes in the tuning solution mass resolution within 0.1 amu?	✓			
Were %RSD of isotopes in the tuning solution ≤5%?	✓			
III. Calibration				
Were all instruments calibrated daily, each set-up time?	✓			
Were the proper number of standards used?	✓			
Were all initial and continuing calibration verification %Rs within the 90-110% (80-120% for mercury) QC limits?	✓			
Were the low standard checks within 70-130%	✓			
Were all initial calibration correlation coefficients within limits as specified by the method?	✓			
IV. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	✓			
V. ICP Interference Check Sample				
Were ICP interference check samples performed daily?	✓			
Were the AB solution percent recoveries (%R) with the 80-120% QC limits?	✓			
VI. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and duplicate (DUP) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD or MS/DUP. Soil / Water.	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the 75-125 QC limits? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.		✓		(PS/SD in limits)
Were the MS/MSD or duplicate relative percent differences (RPD) ≤ 20% for waters and ≤ 35% for soil samples? A control limit of +/- RL(+/-2X RL for soil) was used for samples that were ≤ 5X the RL, including when only one of the duplicate sample values were ≤ 5X the RL.	✓			
VII. Laboratory control samples				
Was an LCS anaylzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the 80-120% QC limits for water samples and laboratory established QC limits for soils?	✓			

[redacted]

Validation Area	Yes	No	NA	Findings/Comments
VIII. Internal Standards (EPA SW 846 Method 6020/EPA 200.8)				
Were all the percent recoveries (%R) within the 30-120% (6020)/60-125% (200.8) of the intensity of the internal standard in the associated initial calibration?	✓			
If the %Rs were outside the criteria, was a reanalysis performed?			✓	
IX. ICP Serial Dilution				
Was an ICP serial dilution analyzed if analyte concentrations were > 50X the MDL (ICP)/>100X the MDL(ICP/MS)?	✓			
Were all percent differences (%Ds) < 10%?	✓			
Was there evidence of negative interference? If yes, professional judgement will be used to qualify the data.	✓	✓		
X. Sample Result Verification				
Were RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XI. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XII. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target analytes were detected in the field duplicates.	✓			
XIII. Field blanks				
Field blanks were identified in this SDG.		✓	✓	
Target analytes were detected in the field blanks.			✓	

LDC #: 36566A46

VALIDATION FINDINGS WORKSHEET
Sample Specific Element Reference

All circled elements are applicable to each sample.

Sample ID	Matrix	Target Analyte List (TAL)
All		Al, (Sb), As, (Ba), (Be), Cd, Ca, Cr, Co, (Cu), Fe, (Pb), Mg, Mn, Hg, (Ni), K, Se, Ag, Na, Tl, V, (Zn), Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
Analysis Method		
ICP		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
ICP-MS		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
GFAA		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti,

Comments: Mercury by CVAA if performed

LDC #: 36556A4b

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000) Soil preparation factor applied: 100x x 5xdil

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: All

				Sample Identification										
Analyte	Maximum PB[a] (mg/Kg)	Maximum ICB/CCB[a] (ug/l)	Action Level	No qualifiers										
Ni	0.04		0.2											

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 1

				Sample Identification										
Analyte	Maximum PB[a] (mg/Kg)	Maximum ICB/CCB[a] (ug/l)	Action Level	No qualifiers										
Sb		0.023	0.0575											
Be		0.012	0.03											

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 12

				Sample Identification										
Analyte	Maximum PB[a] (mg/Kg)	Maximum ICB/CCB[a] (ug/l)	Action Level	No qualifiers										
Sb		0.023	0.0575											

Samples with analyte concentrations within five times the associated ICB, CCB or PB concentration are listed above with the identifications from the Validation Completeness Worksheet. These sample results were qualified as not detected, "U".

Note : a - The listed analyte concentration is the highest ICB, CCB, or PB detected in the analysis of each element.

LDC #: 36566A4b

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

[redacted]

METHOD: Trace metals (EPA SW 846 Method 6010B/6020A/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Was a matrix spike analyzed for each matrix in this SDG?

Y (N) N/A Were matrix spike percent recoveries (%R) within the control limits of 75-125? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.

(Y) N N/A Were all duplicate sample relative percent differences (RPD) ≤ 20% for water samples and ≤35% for soil samples?

LEVEL IV ONLY:

(Y) N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	MS/MSD ID	Matrix	Analyte	MS %Recovery	MSD %Recovery	RPD (Limits)	Associated Samples	Qualifications
	21/22	S	Sb	56 (72-124)	56		1	~~J/UJ/A~~ for PS=100 (80-120)
			Zn		77 (82-119)		1	NoQual (SD.in) SD=2.5%D
								NoQual (PS.in)

Comments: _____

LDC#: 36566A4b

VALIDATION FINDINGS WORKSHEET

Page: 1 of 1

[redacted]

Split Duplicates

METHOD: Metals (EPA Method 6010B/7000)

Analyte	Concentration (mg/Kg)		RPD (≤50)	Qualifiers (Parents Only)
	12	FTBL-SED-29-0-6-050916-QA		
Antimony	0.125	2.0U	176	J/NJ/A ~~NQ (LOQ)~~
Arsenic	4.20	4.9	15	
Beryllium	1.56	1.6	3	
Copper	10.7	13.0	19	
Lead	11.7	15.1	25	
Nickel	6.69	8.9	28	
Zinc	44.4	57.8	26	

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LDC #: 36566A46

VALIDATION FINDINGS WORKSHEET
Initial and Continuing Calibration Calculation Verification

[redacted]

METHOD: Trace metals (EPA SW 846 Method 6010/6020/7000)

An initial and continuing calibration verification percent recovery (%R) was recalculated for each type of analysis using the following formula:

%R = Found x 100 / True

Where, Found = concentration (in ug/L) of each analyte measured in the analysis of the ICV or CCV solution
True = concentration (in ug/L) of each analyte in the ICV or CCV source

Standard ID	Type of Analysis	Element	Found (ug/L)	True (ug/L)	Recalculated %R	Reported %R	Acceptable (Y/N)
.1	ICP (Initial calibration)						
ICV	ICP/MS (Initial calibration)	Ni	24.9	25.0	100	100	Y
	CVAA (Initial calibration)						
	ICP (Continuing calibration)						
CCV6	ICP/MS (Continuing calibration)	PD	23.6	25	94	94	Y
	CVAA (Continuing calibration)						

Comments:

LDC #: 36566A46

VALIDATION FINDINGS WORKSHEET
Level IV Recalculation Worksheet

[redacted]

METHOD: Trace metals (EPA CLP SOW ISM01.2)

Percent recoveries (%R) for an ICP interference check sample, a laboratory control sample and a matrix spike sample were recalculated using the following formula:

$$\%R = \frac{Found}{True} \times 100$$

Where, Found = Concentration of each analyte measured in the analysis of the sample. For the matrix spike calculation, Found = SSR (spiked sample result) - SR (sample result).
True = Concentration of each analyte in the source.

A sample and duplicate relative percent difference (RPD) was recalculated using the following formula:

$$RPD = \frac{|S-D|}{(S+D)/2} \times 100$$

Where, S = Original sample concentration
D = Duplicate sample concentration

An ICP serial dilution percent difference (%D) was recalculated using the following formula:

$$\%D = \frac{|I-SDR|}{I} \times 100$$

Where, I = Initial Sample Result (ug/L)
SDR = Serial Dilution Result (ug/L) (Instrument Reading x 5)

Sample ID	Type of Analysis	Element	Found / S / I (units)	True / D / SDR (units)	Recalculated %R / RPD / %D	Reported %R / RPD / %D	Acceptable (Y/N)
ICSAB	ICP interference check	Ni	45.1	50	90	90	Y
LCS	Laboratory control sample	Be	99.0	100	99	99	
21	Matrix spike	Sb	(SSR-SR) 51.674	91.5	56	56	
21DD	Duplicate	Ni	94.11	80.92	15.1	15.1	
1	ICP serial dilution	Zn	158.365 ug/L	161.85 ug/L	2.2	2.5	

Comments: _____

LDC #: 35566A4b

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

[redacted]

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Have results been reported and calculated correctly?
Y N N/A Are results within the calibrated range of the instruments and within the linear range of the ICP?
Y N N/A Are all detection limits below the CRDL?

Detected analyte results for _____ were recalculated and verified using the following equation:

Concentration = $\frac{(RD)(FV)(Dil)}{(In.\ Vol.)}$

RD = Raw data concentration
FV = Final volume (ml)
In. Vol. = Initial volume (ml) or weight (G)
Dil = Dilution factor

Recalculation:

$$\frac{100mL(5)(11,256ug/L)}{0.994(1.10g)(1000)} = 5,147mg/kg$$

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
	1	As	5.15	5.15	Y
	12	Ni	6.69	6.69	Y

Note: _____

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401 East Main Street
Suite 400
El Paso, TX 79901

RE: Closed Castner Firing Range / 06261038.0001.00400

Enclosed are the results of the sample(s) submitted to our laboratory January 18, 2017
For your reference, these analyses have been assigned our service request number **K1700531.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3376. You may also contact me via email at gregory.salata@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

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Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEC UST	http://dec.alaska.gov/applications/eh/ehllabreports/USTLabs.aspx	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L14-51
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	Not available	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/portal/DIVISIONS/PublicParticipationandPermitSupport/LouisianaLaboratoryAccreditationProgram.aspx	03016
Maine DHS	Not available	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Montana DPHHS	http://www.dphhs.mt.gov/publichealth/	CERT0047
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/oqa/	WA005
North Carolina DWQ	http://www.dwqlab.org/	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/envserv/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	http://www.epa.gov/region8/water/dwhome/wyomingdi.html	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Case Narrative

ALS Environmental—Kelso Laboratory
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Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

ALS ENVIRONMENTAL

Client:	ARCADIS U.S., Inc.	**Service Request No.:**	K1700531
Project:	Closed Castner Firing Range/ 06261038.0001.00400	**Date Received:**	01/18/17
Sample Matrix:	Soil		

Case Narrative

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier IV validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Six soil samples were received for analysis at ALS Environmental on 01/18/17. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4ºC upon receipt at the laboratory.

Total Metals

Matrix Spike Recovery Exceptions:
The matrix spike and matrix spike duplicate recoveries of Zinc for sample FTBL-SED-073-0-6-011717 was outside control criteria. Recovery in the Laboratory Control Sample (LCS) was acceptable, which indicated the analytical batch was in control. No further corrective action was appropriate.

No other anomalies associated with the analysis of these samples were observed.

Chain of Custody

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Chain of Custody

K1700531

ADDRESS 1317 South 13th Ave., Kelso, WA 98626
PHONE 1 360 577 7222 FAX 1 360 636 1068
Columbia Analytical Services, Inc.
Part of the ALS Group A Campbell Brothers Limited Company

Work Order No.:

Project Manager	[redacted]	**Bill to:**	PO Number: 06261038.0001.00400
Client Name:	Arcadis	**Company:**	Arcadis
Address:	401 East Main Street, Suite 400	**Address:**	630 Plaza Drive
City, State ZIP:	El Paso, Texas 79901	**City, State ZIP:**	Highlands Ranch, Co 80129
Email:	[redacted] **Phone:** 915-433-1761	**Email:**	accountspayable.administration@arcadis.com
Project Name:	[redacted]		
Project Number:	06261038.0001.00400		

[redacted]

SAMPLE RECEIPT

Temperature (°C):		Temp Blank Present		
Received Intact:	Yes	No	N/A	Wet Ice / Blue Ice
Cooler Custody Seals:	Yes	No	N/A	Total Containers:
Sample Custody Seals:	Yes	No	N/A	

REQUESTED ANALYSIS

TAT

Standard
Same Day *** [redacted]
Next Day ***
5 Day
EDD

*** Please call fo availability

Due Date:

Comments

Sample Identification	Matrix	Date Sampled	Time Sampled	Lab ID	No. of Containers	Zinc	Arsenic
FTBL-SED- 073-0-6-011717	S	1-17-17	1335		1	X	
FTBL-SED- 072-0-6-011717	S	1-17-17	1315		1	X	
FTBL-SED- 070-0-6-011717	S	1-17-17	1424		1	X	
FTBL-SED- 071-0-6-011717	S	1-17-17	1440		1	X	
FTBL-SED- 069-0-6-011717	S	1-17-17	1515		1	X	
~~FTBL-SED-~~ FD-011717-1	S	1-17-17			1	X	
FTBL-SED-	[redacted]				1		
FTBL-SED-					1		
FTBL-SED-					1		
FTBL-SED-					1		
FTBL-SED-					1		

Dissolved	Ag, Al, As, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, K, Li, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Se, Si, Sn, Sr, Tl, V, Zn, Zr	**Additional Methods Available Upon Request**
Total	Ag, Al, As, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, K, Li, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Se, Si, Sn, Sr, Tl, V, Zn, Zr	

RELINQUISHED BY			**RECEIVED BY**		
		Date/Time	Print Name	Signature	Date/Time
[redacted]		1-17-17 1700	[redacted]		1/18/17 1050

PC GS

Cooler Receipt and Preservation Form

Client Arcadis Service Request K17 005531

Received: 1/18/17 Opened: 1/18/17 By: CG Unloaded: 1/18/17 By: CG

1. Samples were received via? *USPS* (*Fed Ex*) *UPS* *DHL* *PDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) (*Cooler*) *Box* *Envelope* *Other* _____ *NA*
3. Were custody seals on coolers? NA (Y) N If yes, how many and where? 2 Front
   If present, were custody seals intact? (Y) N If present, were they signed and dated? (Y) N

Raw Cooler Temp	Corrected Cooler Temp	Raw Temp Blank	Corrected Temp Blank	Corr. Factor	Thermometer ID	Cooler/COC ID (NA)	Tracking Number NA	Filed
-0.6	-0.6	0.1	0.1	0.0	370		8026 5614 5193	

4. Packing material: *Inserts* *Baggies* (*Bubble Wrap*) *Gel Packs* (*Wet Ice*) *Dry Ice* *Sleeves* _____
5. Were custody papers properly filled out (ink, signed, etc.)? NA (Y) N
6. Were samples received in good condition (temperature, unbroken)? *Indicate in the table below.* NA (Y) N
   If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*
7. Were all sample labels complete (i.e analysis, preservation, etc.)? NA (Y) N
8. Did all sample labels and tags agree with custody papers? *Indicate major discrepancies in the table on page 2.* NA (Y) N
9. Were appropriate bottles/containers and volumes received for the tests indicated? NA (Y) N
10. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* (NA) Y N
11. Were VOA vials received without headspace? *Indicate in the table below.* (NA) Y N
12. Was C12/Res negative? (NA) Y N

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Out of Temp	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, & Resolutions: _____

7/25/16

Page ____ ***of*** ____

Total Solids

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Analytical Report

Client:	ARCADIS U.S., Inc.	**Service Request:**	K1700531
Project:	Closed Castner Firing Range/06261038.0001.00400	**Date Collected:**	01/17/17
Sample Matrix:	Soil	**Date Received:**	01/18/17
Analysis Method:	160.3 Modified	**Units:**	Percent
Prep Method:	None	**Basis:**	Air Dried

Solids, Total

Sample Name	Lab Code	Result	MRL	MDL	Dil.	Date Analyzed	Q
FTBL-SED-073-0-6-011717	K1700531-001	**84.3**	-	-	1	01/20/17 16:25	
FTBL-SED-072-0-6-011717	K1700531-002	**86.8**	-	-	1	01/20/17 16:25	
FTBL-SED-070-0-6-011717	K1700531-003	**84.4**	-	-	1	01/20/17 16:25	
FTBL-SED-071-0-6-011717	K1700531-004	**79.7**	-	-	1	01/20/17 16:25	
FTBL-SED-069-0-6-011717	K1700531-005	**88.5**	-	-	1	01/20/17 16:25	
FD-011717-1	K1700531-006	**85.1**	-	-	1	01/20/17 16:25	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	ARCADIS U.S., Inc.	**Service Request:**	K1700531
Project	Closed Castner Firing Range/06261038.0001.00400	**Date Collected:**	01/17/17
Sample Matrix:	Soil	**Date Received:**	01/18/17
Analysis Method:	160.3 Modified	**Units:**	Percent
Prep Method:	None	**Basis:**	Air Dried

Replicate Sample Summary
Inorganic Parameters

Sample Name:	Lab Code:	MRL	Sample Result	Duplicate Result	Average	RPD	RPD Limit	Date Analyzed
Batch QC	K1700524-002DUP	-	87.6	87.6	87.6	<1	20	01/20/17
Batch QC	K1700528-007DUP	-	91.0	90.2	90.6	<1	20	01/20/17
FTBL-SED-069-0-6-011717	K1700531-005DUP	-	88.5	87.8	88.2	<1	20	01/20/17

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	ARCADIS U.S., Inc.	**Service Request:**	K1700531
Project	Closed Castner Firing Range/06261038.0001.00400	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Analysis Method:	160.3 Modified	**Units:**	Percent
Prep Method:	None	**Basis:**	As Received

Replicate Sample Summary
Inorganic Parameters

Sample Name:	Lab Code:	MRL	Sample Result	Duplicate Result	Average	RPD	RPD Limit	Date Analyzed
Batch QC	K1700560-002DUP	-	71.0	71.7	71.4	<1	20	01/20/17
Batch QC	K1700577-002DUP	-	84.9	88.4	86.7	4	20	01/20/17

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Metals

ALS Environmental—Kelso Laboratory
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www.alsglobal.com

Analytical Report

Client:	ARCADIS U.S., Inc.	**Service Request:**	K1700531
Project:	Closed Castner Firing Range/06261038.0001.00400	**Date Collected:**	01/17/17 13:35
Sample Matrix:	Soil	**Date Received:**	01/18/17 10:50
Sample Name:	FTBL-SED-073-0-6-011717	**Basis:**	Dry
Lab Code:	K1700531-001		

Total Metals

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Zinc	6020A	**101**	mg/Kg	0.44	0.44	0.18	5	01/25/17 13:17	01/24/17	

Analytical Report

Client:	ARCADIS U.S., Inc.	**Service Request:**	K1700531
Project:	Closed Castner Firing Range/06261038.0001.00400	**Date Collected:**	01/17/17 13:15
Sample Matrix:	Soil	**Date Received:**	01/18/17 10:50
Sample Name:	FTBL-SED-072-0-6-011717	**Basis:**	Dry
Lab Code:	K1700531-002		

Total Metals

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Zinc	6020A	**77.7**	mg/Kg	0.45	0.45	0.18	5	01/25/17 13:28	01/24/17	

Analytical Report

Client:	ARCADIS U.S., Inc.	**Service Request:**	K1700531
Project:	Closed Castner Firing Range/06261038.0001.00400	**Date Collected:**	01/17/17 14:24
Sample Matrix:	Soil	**Date Received:**	01/18/17 10:50
Sample Name:	FTBL-SED-070-0-6-011717	**Basis:**	Dry
Lab Code:	K1700531-003		

Total Metals

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Zinc	6020A	**102**	mg/Kg	0.51	0.51	0.20	5	01/25/17 13:30	01/24/17	

Analytical Report

Client:	ARCADIS U.S., Inc.	**Service Request:**	K1700531
Project:	Closed Castner Firing Range/06261038.0001.00400	**Date Collected:**	01/17/17 14:40
Sample Matrix:	Soil	**Date Received:**	01/18/17 10:50
Sample Name:	FTBL-SED-071-0-6-011717	**Basis:**	Dry
Lab Code:	K1700531-004		

Total Metals

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Zinc	6020A	**120**	mg/Kg	0.49	0.49	0.20	5	01/25/17 13:37	01/24/17	

Analytical Report

Client:	ARCADIS U.S., Inc.	**Service Request:**	K1700531
Project:	Closed Castner Firing Range/06261038.0001.00400	**Date Collected:**	01/17/17 15:15
Sample Matrix:	Soil	**Date Received:**	01/18/17 10:50
Sample Name:	FTBL-SED-069-0-6-011717	**Basis:**	Dry
Lab Code:	K1700531-005		

Total Metals

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Zinc	6020A	**58.8**	mg/Kg	0.45	0.45	0.18	5	01/25/17 13:39	01/24/17	

Analytical Report

Client:	ARCADIS U.S., Inc.	**Service Request:**	K1700531
Project:	Closed Castner Firing Range/06261038.0001.00400	**Date Collected:**	01/17/17
Sample Matrix:	Soil	**Date Received:**	01/18/17 10:50
Sample Name:	FD-011717-1	**Basis:**	Dry
Lab Code:	K1700531-006		

Total Metals

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Zinc	6020A	**80.6**	mg/Kg	0.45	0.45	0.18	5	01/25/17 13:41	01/24/17	

Analytical Report

Client:	ARCADIS U.S., Inc.	**Service Request:**	K1700531
Project:	Closed Castner Firing Range/06261038.0001.00400	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	Dry
Lab Code:	KQ1700728-01		

Total Metals

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Zinc	6020A	ND U	mg/Kg	0.5	0.50	0.20	5	01/25/17 13:13	01/24/17	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	ARCADIS U.S., Inc.	**Service Request:**	K1700531
Project:	Closed Castner Firing Range/06261038.0001.00400	**Date Collected:**	01/17/17
Sample Matrix:	Soil	**Date Received:**	01/18/17
		Date Analyzed:	01/25/17
		Date Extracted:	01/24/17

Duplicate Matrix Spike Summary
Total Metals

Sample Name:	FTBL-SED-073-0-6-011717	**Units:**	mg/Kg
Lab Code:	K1700531-001	**Basis:**	Dry
Analysis Method:	6020A		
Prep Method:	EPA 3050B		

		Matrix Spike KQ1700728-03			**Duplicate Matrix Spike** KQ1700728-04					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Zinc	101	182	106	76 J	184	106	78 J	82-119	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Printed 1/30/2017 2:21:18 PM Superset Reference:

Client: ARCADIS U.S., Inc.
Project: Closed Castner Firing Range/06261038.0001.00400
Sample Matrix: Soil

Service Request: K1700531
Date Analyzed: 01/25/17

Lab Control Sample Summary
Total Metals

Units:mg/Kg
Basis: Dry

Lab Control Sample
KQ1700728-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Zinc	6020A	113	100	113	82-119

Prep Summary Report

Client: ARCADIS U.S., Inc. **Service Request:**K1700531
Project: Closed Castner Firing Range/06261038.0001.00400
Sample Matrix: Soil

Metals

Prep Method: EPA 3050B **Extraction Lot:**280225
Analytical Method: 6020A

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Amount	Percent Solids
FTBL-SED-073-0-6-011717	K1700531-001	1/17/17	1/18/17	1.345 g	100 mL	
FTBL-SED-072-0-6-011717	K1700531-002	1/17/17	1/18/17	1.289 g	100 mL	
FTBL-SED-070-0-6-011717	K1700531-003	1/17/17	1/18/17	1.158 g	100 mL	
FTBL-SED-071-0-6-011717	K1700531-004	1/17/17	1/18/17	1.285 g	100 mL	
FTBL-SED-069-0-6-011717	K1700531-005	1/17/17	1/18/17	1.246 g	100 mL	
FD-011717-1	K1700531-006	1/17/17	1/18/17	1.300 g	100 mL	
Method Blank	KQ1700728-01MB	NA	NA	1.00 g	100 mL	
Lab Control Sample	KQ1700728-02LCS	NA	NA	1 g	100 mL	
Matrix Spike	KQ1700728-03MS	1/17/17	1/18/17	1.118 g	100 mL	
Duplicate Matrix Spike	KQ1700728-04DMS	1/17/17	1/18/17	1.120 g	100 mL	

Client: ARCADIS U.S., Inc. **Service Request:** K1700531

Project: Closed Castner Firing Range/06261038.0001.00400

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Concentration Units: ug/L

Analyte	Method	Analysis Batch	Initial Calibration			Continuing Calibration			Continuing Calibration		
			True	Found	%R (1)	True	Found	%R (1)	True	Found	%R (1)
Zinc	6020A	532307	25.0	24.8	99	25.0	24.2	97	25.0	25.6	102

Client: ARCADIS U.S., Inc. **Service Request:** K1700531

Project: Closed Castner Firing Range/06261038.0001.00400

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Concentration Units: ug/L

Analyte	Method	Analysis Batch	Initial Calibration			Continuing Calibration			Continuing Calibration		
			True	Found	%R (1)	True	Found	%R (1)	True	Found	%R (1)
Zinc	6020A	532307				25.0	25.6	102	25.0	25.4	102

Client: ARCADIS U.S., Inc. **Service Request:** K1700531

Project: Closed Castner Firing Range/06261038.0001.00400

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Concentration Units: ug/L

Analyte	Method	Analysis Batch	Initial Calibration			Continuing Calibration			Continuing Calibration		
			True	Found	%R (1)	True	Found	%R (1)	True	Found	%R (1)
Zinc	6020A	532307				25.0	25.7	103	25.0	25.5	102

Client: ARCADIS U.S., Inc. **Service Request:** K1700531

Project: Closed Castner Firing Range/06261038.0001.00400

INITIAL AND CONTINUING CALIBRATION BLANK

Concentration Units: ug/L

Analyte	Method	Analysis Batch	Initial Calibration Blank		Continuing Calibration Blank		Continuing Calibration Blank		Continuing Calibration Blank	
			Result	C	Result	C	Result	C	Result	C
Zinc	6020A	532307	0.4	U	0.4	U	0.4	U	0.4	U

Client: ARCADIS U.S., Inc. **Service Request:** K1700531

Project: Closed Castner Firing Range/06261038.0001.00400

INITIAL AND CONTINUING CALIBRATION BLANK

Concentration Units: ug/L

Analyte	Method	Analysis Batch	Initial Calibration Blank		Continuing Calibration Blank		Continuing Calibration Blank		Continuing Calibration Blank	
			Result	C	Result	C	Result	C	Result	C
Zinc	6020A	532307			0.4	U	0.4	U	0.4	U

Client: ARCADIS U.S., Inc. **Service Request:** K1700531

Project: Closed Castner Firing Range/06261038.0001.00400

LOW LEVEL INITIAL AND LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Concentration Units: ug/L

Sample ID / Analyte	Method	Analysis Batch:	Result	True Value	% Rec	% Rec. Limits	Analysis Date
LLICVS							
Zinc	6020A	532307	1.0	1.0	104	80-120	01/25/17 11:39
LLCCVS							
Zinc	6020A	532307	1.0	1.0	102	70-130	01/25/17 12:54
LLCCVS							
Zinc	6020A	532307	1.2	1.0	117	70-130	01/25/17 13:48

Client: ARCADIS U.S., Inc. **Service Request:** K1700531

Project: Closed Castner Firing Range/06261038.0001.00400

ICP INTERFERENCE CHECK SAMPLE

Sample ID ICSA **Concentration Units:** ug/L

Analyte	Method	Analysis Batch:	Result	True Value	% Rec	% Rec. Limits	Analysis Date
Zinc	6020A	532307	0.5	-	-	-	01/25/17 11:43

Client: ARCADIS U.S., Inc. **Service Request:** K1700531

Project: Closed Castner Firing Range/06261038.0001.00400

ICP INTERFERENCE CHECK SAMPLE

Sample ID ICSAB **Concentration Units:** ug/L

Analyte	Method	Analysis Batch:	Result	True Value	% Rec	% Rec. Limits	Analysis Date
Zinc	6020A	532307	21.2	25.0	85	80-120	01/25/17 11:45

Client: ARCADIS U.S., Inc. **Service Request:** K1700531

Project: Closed Castner Firing Range/06261038.0001.00400

POST SPIKE SAMPLE RECOVERY

Concentration Units: ug/L

Sample ID / Analyte	Method	Analysis Batch:	Initial Sample Result	Post Spike Result	True Value	% Rec	% Rec. Limits	Analysis Date
K1700531-001A								
Zinc	6020A	532307	230	273	50	86	80-120	01/25/17 13:22

Results flagged with a pound (#) indicate the control criteria is not applicable.

Client: ARCADIS U.S., Inc. **Service Request:** K1700531

Project: Closed Castner Firing Range/06261038.0001.00400

ICP SERIAL DILUTIONS

Concentration Units: ug/L

Sample ID / Analyte	Method	Analysis Batch:	Initial Sample Result	Serial Dillution Result	% Diff	% Diff. Limit	Analysis Date
K1700531-001SDL							
Zinc	6020A	532307	230	240	4	10	01/25/17 13:20

Client: ARCADIS U.S., Inc. **Service Request:** K1700531

Project: Closed Castner Firing Range/06261038.0001.00400

Detection Limits

Matrix: Soil

Analyte	Mass	Units	LOQ	LOD	MDL	Method
Zinc	66	ug/L	1	1	0.4	6020A

Client: ARCADIS U.S., Inc. **Service Request:** K1700531

Project: Closed Castner Firing Range/06261038.0001.00400

ICP Linear Range (Quarterly)

Instrument: K-ICP-MS-05

Analyte	Concentration (ug/L)	Method
Zinc 66	3000	6020A

Client: ARCADIS U.S., Inc. **Service Request:** K1700531

Project: Closed Castner Firing Range/06261038.0001.00400

Analysis Run Log

Instrument ID: **K-ICP-MS-05** **Analytical BatchID:** **532307**

Sample	Dilution Factor	Date/Time	Zn
ZZZZZZ	1	01/25/17 11:23	
ZZZZZZ	1	01/25/17 11:26	
ICV	1	01/25/17 11:28	X
CCV	1	01/25/17 11:30	X
ICB	1	01/25/17 11:32	X
CCB	1	01/25/17 11:34	X
ZZZZZZ	1	01/25/17 11:36	
LLICVS	1	01/25/17 11:39	X
ZZZZZZ	1	01/25/17 11:41	
ICSA	1	01/25/17 11:43	X
ICSAB	1	01/25/17 11:45	X
ZZZZZZ	5	01/25/17 11:47	
ZZZZZZ	20	01/25/17 11:50	
ZZZZZZ	5	01/25/17 11:52	
ZZZZZZ	25	01/25/17 11:54	
ZZZZZZ	5	01/25/17 11:56	
ZZZZZZ	5	01/25/17 11:58	
ZZZZZZ	5	01/25/17 12:00	
ZZZZZZ	5	01/25/17 12:02	
ZZZZZZ	5	01/25/17 12:05	
ZZZZZZ	5	01/25/17 12:07	
CCV	1	01/25/17 12:09	X
CCB	1	01/25/17 12:11	X
ZZZZZZ	5	01/25/17 12:13	
ZZZZZZ	5	01/25/17 12:15	
ZZZZZZ	5	01/25/17 12:18	
ZZZZZZ	5	01/25/17 12:20	
ZZZZZZ	5	01/25/17 12:22	
ZZZZZZ	5	01/25/17 12:24	
ZZZZZZ	5	01/25/17 12:26	
ZZZZZZ	5	01/25/17 12:28	
ZZZZZZ	5	01/25/17 12:31	
ZZZZZZ	5	01/25/17 12:33	
CCV	1	01/25/17 12:35	X
CCB	1	01/25/17 12:37	X
ZZZZZZ	5	01/25/17 12:39	
ZZZZZZ	5	01/25/17 12:41	

Client: ARCADIS U.S., Inc. **Service Request:** K1700531

Project: Closed Castner Firing Range/06261038.0001.00400

Analysis Run Log

Instrument ID: **K-ICP-MS-05** **Analytical BatchID:** **532307**

Sample	Dilution Factor	Date/Time	Zn
ZZZZZZ	5	01/25/17 12:43	
ZZZZZZ	100	01/25/17 12:46	
CCV	1	01/25/17 12:48	X
CCB	1	01/25/17 12:52	X
LLCCVS	1	01/25/17 12:54	X
ZZZZZZ	1	01/25/17 12:56	
ZZZZZZ	1	01/25/17 13:01	
ZZZZZZ	1	01/25/17 13:03	
ZZZZZZ	1	01/25/17 13:05	
ZZZZZZ	1	01/25/17 13:08	
ZZZZZZ	500	01/25/17 13:11	
KQ1700728-01MB	5	01/25/17 13:13	X
KQ1700728-02LCS	20	01/25/17 13:15	X
K1700531-001	5	01/25/17 13:17	X
K1700531-001SDL	25	01/25/17 13:20	X
K1700531-001PS	5	01/25/17 13:22	X
K1700531-001MS	5	01/25/17 13:24	X
K1700531-001DMS	5	01/25/17 13:26	X
K1700531-002	5	01/25/17 13:28	X
K1700531-003	5	01/25/17 13:30	X
CCV	1	01/25/17 13:32	X
CCB	1	01/25/17 13:35	X
K1700531-004	5	01/25/17 13:37	X
K1700531-005	5	01/25/17 13:39	X
K1700531-006	5	01/25/17 13:41	X
CCV	1	01/25/17 13:43	X
CCB	1	01/25/17 13:45	X
LLCCVS	1	01/25/17 13:48	X
ZZZZZZ	1	01/25/17 13:50	
ZZZZZZ	1	01/25/17 13:52	

Client: ARCADIS U.S., Inc. **Service Request:** K1700531

Project: Closed Castner Firing Range/06261038.0001.00400

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Instrument ID: **K-ICP-MS-05** **Analytical BatchID:** **532307**

Sample	Date/Time	Ge72He	Lu175He
ZZZZZZ	01/25/17 11:23		
ZZZZZZ	01/25/17 11:26		
ICV	01/25/17 11:28	99	102
CCV	01/25/17 11:30	99	99
ICB	01/25/17 11:32	98	98
CCB	01/25/17 11:34	97	100
ZZZZZZ	01/25/17 11:36		
LLICVS	01/25/17 11:39	99	102
ZZZZZZ	01/25/17 11:41		
ICSA	01/25/17 11:43	86	91
ICSAB	01/25/17 11:45	84	94
ZZZZZZ	01/25/17 11:47		
ZZZZZZ	01/25/17 11:50		
ZZZZZZ	01/25/17 11:52		
ZZZZZZ	01/25/17 11:54		
ZZZZZZ	01/25/17 11:56		
ZZZZZZ	01/25/17 11:58		
ZZZZZZ	01/25/17 12:00		
ZZZZZZ	01/25/17 12:02		
ZZZZZZ	01/25/17 12:05		
ZZZZZZ	01/25/17 12:07		
CCV	01/25/17 12:09	100	101
CCB	01/25/17 12:11	99	102
ZZZZZZ	01/25/17 12:13		
ZZZZZZ	01/25/17 12:15		
ZZZZZZ	01/25/17 12:18		
ZZZZZZ	01/25/17 12:20		
ZZZZZZ	01/25/17 12:22		
ZZZZZZ	01/25/17 12:24		
ZZZZZZ	01/25/17 12:26		
ZZZZZZ	01/25/17 12:28		
ZZZZZZ	01/25/17 12:31		
ZZZZZZ	01/25/17 12:33		
CCV	01/25/17 12:35	105	106
CCB	01/25/17 12:37	102	105
ZZZZZZ	01/25/17 12:39		
ZZZZZZ	01/25/17 12:41		

Client: ARCADIS U.S., Inc. **Service Request:** K1700531

Project: Closed Castner Firing Range/06261038.0001.00400

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Instrument ID: **K-ICP-MS-05** **Analytical BatchID:** **532307**

Sample	Date/Time	Ge72He	Lu175He
ZZZZZZ	01/25/17 12:43		
ZZZZZZ	01/25/17 12:46		
CCV	01/25/17 12:48	99	102
CCB	01/25/17 12:52	99	103
LLCCVS	01/25/17 12:54	98	100
ZZZZZZ	01/25/17 12:56		
ZZZZZZ	01/25/17 13:01		
ZZZZZZ	01/25/17 13:03		
ZZZZZZ	01/25/17 13:05		
ZZZZZZ	01/25/17 13:08		
ZZZZZZ	01/25/17 13:11		
KQ1700728-01MB	01/25/17 13:13	100	103
KQ1700728-02LCS	01/25/17 13:15	101	105
K1700531-001	01/25/17 13:17	99	102
K1700531-001SDL	01/25/17 13:20	101	103
K1700531-001PS	01/25/17 13:22	101	102
K1700531-001MS	01/25/17 13:24	102	103
K1700531-001DMS	01/25/17 13:26	99	101
K1700531-002	01/25/17 13:28	102	103
K1700531-003	01/25/17 13:30	105	104
CCV	01/25/17 13:32	105	106
CCB	01/25/17 13:35	103	107
K1700531-004	01/25/17 13:37	103	106
K1700531-005	01/25/17 13:39	108	107
K1700531-006	01/25/17 13:41	102	104
CCV	01/25/17 13:43	108	110
CCB	01/25/17 13:45	107	107
LLCCVS	01/25/17 13:48	105	106
ZZZZZZ	01/25/17 13:50		
ZZZZZZ	01/25/17 13:52		

Raw Data

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Total Solids

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Benchsheet

Service Request #: K1700579, K1700577, KQ1700613, K1700554, K1700560, K1700576, K1700515, K1700524, K1700528, K1700530, K1700531

Run #: 531809

Test: TS

Balance ID: K-BALANCE-50

Method: 160.3 Modified

Pan ID:	Lab Code:	Tare (g)	Wet Wt. (g)	Tare + Dry Wt. (g)	Dry Weight (g)	% Total Solids	RPD
	K1700579-005	1.282	5.166	3.542	2.26	43.7	
	K1700577-001	1.277	11.913	12.047	10.8	90.4	
	K1700577-002	1.292	11.131	10.740	9.45	84.9	
	K1700577-002DUP	1.295	12.928	12.726	11.4	88.4	4
	K1700577-003	1.287	10.105	10.097	8.81	87.2	
	K1700577-004	1.270	10.512	10.604	9.33	88.8	
	K1700577-005	1.288	10.164	7.105	5.82	57.2	
	K1700577-006	1.271	11.002	10.181	8.91	81.0	
	K1700554-001	1.281	10.768	10.951	9.67	89.8	
	K1700554-002	1.298	10.605	11.008	9.71	91.6	
	K1700560-001	1.281	11.448	10.039	8.76	76.5	
	K1700560-002	1.287	10.820	8.971	7.68	71.0	
	K1700560-002DUP	1.273	10.775	9.003	7.73	71.7	<1
	K1700560-003	1.292	11.985	11.218	9.93	82.8	
	K1700560-004	1.274	11.013	9.982	8.71	79.1	
	K1700576-001	1.288	10.407	10.283	9.00	86.4	
	K1700576-002	1.292	11.000	11.363	10.1	91.6	
	K1700576-003	1.294	10.163	10.165	8.87	87.3	
	K1700515-001	1.295	10.299	6.798	5.50	53.4	
	K1700515-002	1.290	10.351	8.001	6.71	64.8	
	K1700515-007	1.286	10.945	7.218	5.93	54.2	
	K1700524-001	1.291	10.255	10.502	9.21	89.8	
	K1700524-002	1.287	10.614	10.582	9.30	87.6	
	K1700524-002DUP	1.293	11.374	11.260	9.97	87.6	<1
	K1700524-003	1.277	11.079	11.199	9.92	89.6	
	K1700524-004	1.284	11.162	11.338	10.1	90.1	
	K1700524-005	1.283	12.406	12.477	11.2	90.2	
	K1700528-001	1.285	14.830	14.387	13.1	88.3	
	K1700528-002	1.286	10.257	10.593	9.31	90.7	
	K1700528-003	1.286	13.440	13.227	11.9	88.8	
	K1700528-004	1.289	11.987	12.437	11.1	93.0	
	K1700528-005	1.294	10.109	10.515	9.22	91.2	
	K1700528-006	1.273	10.168	10.051	8.78	86.3	
	K1700528-007	1.293	10.742	11.070	9.78	91.0	
	K1700528-007DUP	1.294	10.689	10.939	9.65	90.2	<1
	K1700528-008	1.292	11.852	11.815	10.5	88.8	
	K1700528-009	1.297	10.105	10.603	9.31	92.1	

Comments: DJM Weight set serial No. 42868 out ap Reviewed by SC 1/24/17

Benchsheet

Service Request #: K1700579, K1700577, KQ1700613, K1700554, K1700560, K1700576, K1700515, K1700524, K1700528, K1700530, K1700531

Run #: 531809

Test: TS

Balance ID: K-BALANCE-50

Method: 160.3 Modified

Pan ID:	Lab Code:	Tare (g)	Wet Wt. (g)	Tare + Dry Wt. (g)	Dry Weight (g)	% Total Solids	RPD
	K1700530-001	1.291	12.446	12.247	11.0	88.0	
	K1700530-002	1.286	11.206	11.282	10.00	89.2	
	K1700530-003	1.285	10.777	10.208	8.92	82.8	
	K1700531-001	1.280	15.733	14.550	13.3	84.3	
	K1700531-002	1.282	10.944	10.779	9.50	86.8	
	K1700531-003	1.288	10.299	9.981	8.69	84.4	
	K1700531-004	1.288	10.179	9.399	8.11	79.7	
	K1700531-005	1.288	11.366	11.342	10.1	88.5	
	K1700531-005DUP	1.287	10.934	10.886	9.60	87.8	<1
	K1700531-006	1.295	15.465	14.456	13.2	85.1	

	Oven ID	Temp In	Temp Out	Date In	Time In	Date Out	Time Out	Thermometer ID
Oven1	k-oven-07	105	105	1/20/2017	16:25	1/23/2017	08:16	

	Cal EQID	Cal Start Value	Cal End Value	Start Date	Start Time	End Date	End Time
Calibration1	K-BALANCE-50	0.999, 99.998	1.000, 99.999	1/20/2017	09:17	1/20/2017	16:24
Calibration2	K-BALANCE-49	1.000, 100.000	1.000, 99.999	1/23/2017	09:30	1/23/2017	09:55

Comments: DJM Weight set serial No. 42868 out ap Reviewed by SC 1/24/17

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Preparation Information Benchsheet

Prep Run: 280225
Team: Metals
Analyst [redacted]

Prep Workflow: MetDigSICP
Prep Method: EPA 3050B
Rush/NPDES: N/A

Status: Prepped
Current Step: Digestion

Prep Date: 01/24/2017 09:35
Due Date: 02/04/2017
Hold Date: 07/16/2017

Lab Code	Client ID	Bottle #	Initial Amt	Initial Basis	Final Volume	Spike Amt	Spike ID	Comments
KQ1700728-01	Method Blank		1.00 g		100 mL			10% HNO3, 10% HCl
KQ1700728-02	Lab Control Sample				100 mL	2 mL 1 mL 1 mL 1 mL	177744 178641 178642 178652	10% HNO3, 10% HCl
K1700531-001	FTBL-SED-073-0-6-011717	.01	1.345 g	As Received	100 mL			10% HNO3, 10% HCl
K1700531-001: KQ1700728-03	Matrix Spike	.01	1.118 g	As Received	100 mL	2 mL 1 mL 1 mL 1 mL	177744 178641 178642 178652	10% HNO3, 10% HCl
K1700531-001: KQ1700728-04	Duplicate Matrix Spike	.01	1.120 g	As Received	100 mL	2 mL 1 mL 1 mL 1 mL	177744 178641 178642 178652	10% HNO3, 10% HCl
K1700531-002	FTBL-SED-072-0-6-011717	.01	1.289 g	As Received	100 mL			10% HNO3, 10% HCl
K1700531-003	FTBL-SED-070-0-6-011717	.01	1.158 g	As Received	100 mL			10% HNO3, 10% HCl
K1700531-004	FTBL-SED-071-0-6-011717	.01	1.285 g	As Received	100 mL			10% HNO3, 10% HCl
K1700531-005	FTBL-SED-069-0-6-011717	.01	1.246 g	As Received	100 mL			10% HNO3, 10% HCl
K1700531-006	FD-011717-1	.01	1.300 g	As Received	100 mL			10% HNO3, 10% HCl

10 Total Samples consisting of 6 Client Samples, 2 Client QC Samples, 2 Batch QC Samples associated with the current Prep Run.

Spiking Solutions

Name	Type	ID	Expires	Name	Type	ID	Expires
K-MET SS1	Spike	177744	4/8/2017	K-MET SS4	Spike	178642	8/15/2017
K-MET SS3	Spike	178641	3/18/2017	K-MET SS5	Spike	178652	6/4/2017

Preparation Materials

Step	Name	ID	Step	Name	ID
All	Teflon Chips	69101	All	K-MET HCL	178073
All	K-MET H2O2	175797	All	K-MET 100ml Centrifuge Tube	178771
All	K-MET HNO3	178047			

Preparation Hardware / Equipment

Step	Name	Property	Value		Step	Name	Property	Value	
Digestion	K-Balance-02	Date Checked	1/24/17		Digestion	K-BlockDigester-01	Observed Temperature	94	deg C
Digestion	K-BlockDigester-01	Corrected Temperature	94	deg C	Digestion	K-BlockDigester-01	Thermometer ID 3147615		NONE
Digestion	K-BlockDigester-	Correction	0	deg C		K-			

	01	Factor			Digestion	BlockDigester-01	Thermometer Location	8	NONE

Preparation Steps

Step	Started	Finished	By	Assisted By	Training?	Comments
Weigh	24-JAN-17 09:35	24-JAN-17 11:30	Keith Linn		N	
Digestion	24-JAN-17 09:35	24-JAN-17 11:30	Keith Linn		N	

Comments

1R: 15 mins, 2R: 30 mins, 3R: 15 mins. Balance-50 was also used and checked 1/20/17.

Review

Reviewed by: [redacted] Date: 1/26/17

METALS SPIKING SOLUTIONS CONCENTRATIONS FORM

Solution Name	Element	mLs of 1000ppm Solution	Final Volume	Solution Conc. mg/L	Enter mls Added
K-MET SS1 *** Add after HNO3 and before ALS-89 when making the solution	HNO3	50.0	1000ml	-	
	Al	100*	1000ml	200	
	Ag	100*	1000ml	5	
	Ba	100*	1000ml	100	
	Be	100*	1000ml	5	
	Cd	100*	1000ml	5	
	Co	100*	1000ml	50	
	Cr	100*	1000ml	20	
	Cu	100*	1000ml	25	
	Fe	100*	1000ml	100	
	Pb	100*	1000ml	50	
	Mn	100*	1000ml	50	
	Ni	100*	1000ml	50	
	Sb***	50	1000ml	50	
	V	100*	1000ml	50	
	Zn	100*	1000ml	50	
K-MET SS2	HNO3	25.0	500ml	-	
	As	2.0	500ml	4	
	Cd	2.0	500ml	4	
	Pb	2.0	500ml	4	
	Se	2.0	500ml	4	
	Tl	2.0	500ml	4	
	Cu	2.0	500ml	4	
K-MET SS3	HNO3	25.0	500ml	-	
	As	50.0	500ml	100	
	Se	50.0	500ml	100	
	Tl	10.0	500ml	20	
	Hg	6	500	12	
K-MET SS4	HNO3	25	500ml	-	
	B	25	500ml	50	
	Mo	50	500ml	100	
K-MET SS5	HNO3	10.0	200ml	-	
	K**	20	200ml	1000	
	Na**	20	200ml	1000	
	Mg**	20	200ml	1000	
	Ca**	20	200ml	1000	
K-MET GFLCSW	HNO3	10.0	1000ml	-	
	As, Pb, Se, Tl	5.0	1000ml	2.5	
	Cd	-	-	1.25	
	Cu	2.5	1000ml	2.5	
K-MET QCP-CICV-1	Ca, Mg, Na, K	no dilution	-	2500	
	Al, Ba	no dilution	-	1000	
	Fe	no dilution	-	500	
	Co, Mn, Ni, V, Zn	no dilution	-	250	
	Cu, Ag	no dilution	-	125	
	Cr	no dilution	-	100	
	Be	no dilution	-	25	
K-MET QCP-CICV-3	As, Pb, Se, Tl	no dilution	-	500	
	Cd	no dilution	-	250	

* Denotes volume of mixed stock standard.
** Denotes 10,000 ppm individual stock standards.

Standard	mls of standard	ppm	Logbook #	Exp. Date

Service Request #	K1700531		
Calibration	012517BMS05		
QC in calibration	012517BMS05		
QC Service Request #	K1700531		
STARLIMS run #	532307		
CAL STD	MS21-41-B	ICSA STD	MS21-38-B
ICV STD	MS21-35-D	ICSAB STD	MS21-38-C
LLICV STD	MS21-35-E	INT STD	MS21-34-B

6020A DOD Data Review Form

	Yes	No	NA
1. Mass calibration <0.1 amu?	X		
2. Resolution <0.9 amu at 10% peak height?	X		
3. Stability RSD ≤5% for five replicates?	X		
4. Appropriate standardization completed?	X		
5. ICV within 10% of true value?	X		
6. CCV's within 10% of true?	X		
7. ICB/CCB's <LOD?	X		
8. Initial Low-level cal. check ± 20%	X		
9. ICSA/ICSAB within ± 20%	X		
10. Method blank <½ the LOQ?	X		
11. LCS within 80-120% DoD limit?	X		
12. Spikes within 80-120% DoD limit?	X		
13. Duplicate Spike RPD <20% DoD limit?	X		
14. Serial dilution within 10%?	X		
15. Post spike within 80-120% DoD limit?	X		
16. Internal standards within 30-120%?	X		
17. Linear range established with High CCV?	X		
18. Adequate rinse out time allowed?	X		
19. Interferences checked?	X		
20. Se over MRL?			X
21. Cd Correction Applied?			X
22. Was run prematurely stopped, If so why?		X	

Comments: LRS= 1000 ppb.

Primary Review by [redacted] Date 1/25/17

Secondary Review by [redacted] Date 1/26/17

R:\icp\misc\data review forms\icpms review form

Data Review Form

Service Request #:	**K1700531**
Instrument ID#:	**K-ICP-MS-05**
DataFile Name:	**R:\ICP\WIP\DATA\K-ICP-MS-05 (Agilent)\012517B.csv**
RUNNO:	**532307**

K1700531-001MS - Metals T

MS Recovery

6020A/Metals T - 66 Zn [He] - Recovery: 76 Limits: 82 - 119

PDS is in control

K1700531-001DMS - Metals T

DMS Recovery

6020A/Metals T - 66 Zn [He] - Recovery: 78 Limits: 82 - 119

Analytical Method 6020A

Primary Approver: [redacted] [redacted] 1/26/17

Secondary Approver:

53207

	Sample						
		Rjct	Data File	Acq. Date-Time	Type	Sample Name	Comment
1			001CALB.	1/25/2017 11:23:55 AM	CalBlk	Blank	
2			002CALS.	1/25/2017 11:26:05 AM	CalStd	25ppb	
3			003_ICV.d	1/25/2017 11:28:14 AM	ICV	ICV	
4			004_CCV.	1/25/2017 11:30:23 AM	CCV	CCV	
5			005_ICB.d	1/25/2017 11:32:32 AM	ICB	ICB	
6			006_CCB.	1/25/2017 11:34:41 AM	CCB	CCB	
7	✓		007LICV.d	1/25/2017 11:36:50 AM	LLICV	LLICVS	
8			008LICV.d	1/25/2017 11:39:10 AM	LLICV	LLICVS	
9	✓		009SMPL.	1/25/2017 11:41:20 AM	Sample	LRSTD	
10			010ICSA.d	1/25/2017 11:43:30 AM	ICSA	ICSA	
11			011ICSB.d	1/25/2017 11:45:38 AM	ICSB	ICSAB	
12			012_PB.d	1/25/2017 11:47:48 AM	PB	KQ1700722-01	5
13			013_LCS.d	1/25/2017 11:50:01 AM	LCS	KQ1700722-02	20
14			014_ARF.d	1/25/2017 11:52:11 AM	AllRef	K1700524-001	5
15			015SMPL.	1/25/2017 11:54:20 AM	Sample	K1700524-001L	25
16			016_PDS.d	1/25/2017 11:56:28 AM	PDS	K1700524-001A	5
17			017_Spk.d	1/25/2017 11:58:37 AM	Spike	K1700524-001S	5
18			018_Spk.d	1/25/2017 12:00:47 PM	Spike	K1700524-001S	5
19			019SMPL.	1/25/2017 12:02:56 PM	Sample	K1700524-002	5
20			020SMPL.	1/25/2017 12:05:06 PM	Sample	K1700524-003	5
21			021SMPL.	1/25/2017 12:07:16 PM	Sample	K1700524-004	5
22			022_CCV.	1/25/2017 12:09:26 PM	CCV	CCV	
23			023_CCB.	1/25/2017 12:11:35 PM	CCB	CCB	
24			024SMPL.	1/25/2017 12:13:44 PM	Sample	K1700524-005	5
25			025SMPL.	1/25/2017 12:15:53 PM	Sample	K1700528-001	5
26			026SMPL.	1/25/2017 12:18:02 PM	Sample	K1700528-002	5
27			027SMPL.	1/25/2017 12:20:11 PM	Sample	K1700528-003	5
28			028SMPL.	1/25/2017 12:22:21 PM	Sample	K1700528-004	5
29			029SMPL.	1/25/2017 12:24:32 PM	Sample	K1700528-005	5
30			030SMPL.	1/25/2017 12:26:41 PM	Sample	K1700528-006	5
31	✓		031SMPL.	1/25/2017 12:28:50 PM	Sample	K1700528-007	5
32			032SMPL.	1/25/2017 12:31:01 PM	Sample	K1700528-008	5
33			033SMPL.	1/25/2017 12:33:10 PM	Sample	K1700528-009	5
34			034_CCV.	1/25/2017 12:35:19 PM	CCV	CCV	
35			035_CCB.	1/25/2017 12:37:29 PM	CCB	CCB	

	Sample						
		Rjct	Data File	Acq. Date-Time	Type	Sample Name	Comment
36			036SMPL.	1/25/2017 12:39:38 PM	Sample	K1700530-001	5
37			037SMPL.	1/25/2017 12:41:48 PM	Sample	K1700530-002	5
38			038SMPL.	1/25/2017 12:43:57 PM	Sample	K1700530-003	5
39			039SMPL.	1/25/2017 12:46:07 PM	Sample	K1700528-007	100
40			040_CCV.	1/25/2017 12:48:16 PM	CCV	CCV	
41			041_CCB.	1/25/2017 12:52:06 PM	CCB	CCB	
42			042LCCV.	1/25/2017 12:54:16 PM	LLCCV	LLCCVS	
43			043LCCV.	1/25/2017 12:56:25 PM	LLCCV	LLCCVS	
44			044LCCV.	1/25/2017 1:01:01 PM	LLCCV	LLCCVS	
45			045_QC1.d	1/25/2017 1:03:10 PM	QC1	LLCCVS 1.0 ppb	
46			046_QC1.d	1/25/2017 1:05:20 PM	QC1	LLCCVS 1.0 ppb	
47			047_QC1.d	1/25/2017 1:08:20 PM	QC1	LLCCVS 1.0 ppb	
48			048SMPL.	1/25/2017 1:11:27 PM	Sample	K1700530-002	500
49			049_PB.d	1/25/2017 1:13:36 PM	PB	KQ1700728-01	5
50			050_LCS.d	1/25/2017 1:15:45 PM	LCS	KQ1700728-02	20
51			051_ARF.d	1/25/2017 1:17:54 PM	AllRef	K1700531-001	5
52			052SMPL.	1/25/2017 1:20:04 PM	Sample	K1700531-001L	25
53			053_PDS.d	1/25/2017 1:22:14 PM	PDS	K1700531-001A	5
54			054_Spk.d	1/25/2017 1:24:22 PM	Spike	K1700531-001S	5
55			055_Spk.d	1/25/2017 1:26:31 PM	Spike	K1700531-001S	5
56			056SMPL.	1/25/2017 1:28:41 PM	Sample	K1700531-002	5
57			057SMPL.	1/25/2017 1:30:49 PM	Sample	K1700531-003	5
58			058_CCV.	1/25/2017 1:32:58 PM	CCV	CCV	
59			059_CCB.	1/25/2017 1:35:08 PM	CCB	CCB	
60			060SMPL.	1/25/2017 1:37:20 PM	Sample	K1700531-004	5
61			061SMPL.	1/25/2017 1:39:28 PM	Sample	K1700531-005	5
62			062SMPL.	1/25/2017 1:41:37 PM	Sample	K1700531-006	5
63			063_CCV.	1/25/2017 1:43:47 PM	CCV	CCV	
64			064_CCB.	1/25/2017 1:45:57 PM	CCB	CCB	
65			065LCCV.	1/25/2017 1:48:06 PM	LLCCV	LLCCVS	
66			066LCCV.	1/25/2017 1:50:16 PM	LLCCV	LLCCVS	
67			067SMPL.	1/25/2017 1:52:26 PM	Sample	LLCCVS 1.0 ppb	

Analyte				
Name		Mass	ISTD	Tune Mode
1	Zn	66	72	He

Analyte				
Name		Mass	ISTD	Tune Mode
2	[Pb]	206	175	He
3	[Pb]	207	175	He
4	Pb	208	175	He
5	Ge	72		He
6	Lu	175		He

US EPA Tune Check Sample Report

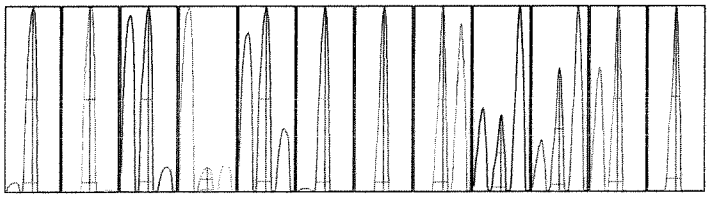
Batch Folder D:\Data\Experiments\012517A.b
Report Comment ALS Tune
Instrument Name G3281A JP13482848

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
7	101136	0.44	5.00	
9	20505	0.68	5.00	
24	116656	0.61	5.00	
25	15600	0.49	5.00	
26	17862	1.87	5.00	
59	147033	0.64	5.00	
115	238668	0.90	5.00	
206	72755	0.88	5.00	
207	66275	1.43	5.00	
208	160147	1.17	5.00	
209	236775	0.76	5.00	
238	352471	1.19	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
7	101518	101670	100982	100631	100878
9	20519	20472	20724	20469	20342
24	116049	116644	116600	117840	116148
25	15701	15521	15548	15662	15569
26	17810	18240	17460	18161	17637
59	147949	147221	146594	145646	147757
115	240755	240794	238674	237124	235993
206	73334	73295	72996	71920	72231
207	67837	66474	65902	65620	65543
208	162828	160751	160240	159048	157865
209	239611	237500	235888	235357	235517
238	357510	354609	353569	349917	346752

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
7	17603	7.05	6.9 - 7.1		0.771	0.900	
9	3592	9.00	8.9 - 9.1		0.780	0.900	
24	20243	24.00	23.9 - 24.1		0.780	0.900	
25	2692	25.00	24.9 - 25.1		0.779	0.900	
26	3118	26.00	25.9 - 26.1		0.777	0.900	
59	27711	59.00	58.9 - 59.1		0.765	0.900	
115	49959	115.00	114.9 - 115.1		0.727	0.900	
206	15862	206.05	205.9 - 206.1		0.781	0.900	
207	14380	207.00	206.9 - 207.1		0.743	0.900	
208	34877	208.00	207.9 - 208.1		0.752	0.900	
209	51924	209.00	208.9 - 209.1		0.754	0.900	
238	74863	238.00	237.9 - 238.1		0.773	0.900	

X% = 5 **Integration Time [sec] =** 0.1 **Acquisition Time [sec] =** 279 **Y Axis =** Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.57	L/min			
RF Matching	1.76	V	Option Gas	0.0	%			
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps			
S/C Temp	2	°C						

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	5.2	V			
Extract 2	-95.0	V	Cell Entrance	-30	V			
Omega Bias	-55	V	Cell Exit	-50	V			
Deflect	10.2	V						

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	false		3rd Gas Flow	0	%			
He Flow	0.0	mL/min	OctP Bias	-8.0	V			
H2 Flow	0.0	mL/min	OctP RF	180	V			
Energy Discrimination	5.0	V						

Calibration Blank Report

Sample Table

Sample Name	Blank
Data File Name	001CALB.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T11:23:55-08:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	Tune Mode	CPS	%RSD
Zn	66	He	21	188.28
[Pb]	206	He	22	38.94
[Pb]	207	He	11	412.30
Pb	208	He	86	26.68

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD
Ge	72	He	46942	0.89
Lu	175	He	1786880	3.20

Calibration Standard Report

Sample Table

Sample Name	25ppb
Data File Name	002CALS.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T11:26:05-08:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	001CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	CPS	%RSD
Zn	66	He	5709	0.02
[Pb]	206	He	100971	0.00
[Pb]	207	He	93090	0.00
Pb	208	He	424656	0.00

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	46095	1.67	46942	98.20	30	120	
Lu	175	He	1788873	1.76	1786880	100.11	30	120	

Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICV
Data File Name	003_ICV.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T11:28:14-08:00
Sample Type	ICV
Dilution	1
Comment	
ISTD Ref File Name	001CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Zn	66	He	24.844	5.273	5719	4.42	25	99	
[Pb]	206	He	25.025	1.835	103092	0.85	25	100	
[Pb]	207	He	25.942	1.547	98533	1.25	25	104	
Pb	208	He	25.348	1.715	439183	0.72	25	101	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	46466	0.89	46942	98.99	30	120	
Lu	175	He	1824542	1.24	1786880	102.11	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	004_CCV.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T11:30:23-08:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	001CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Zn	66	He	24.198	4.339	5553	4.61	25	97	
[Pb]	206	He	25.296	1.605	100800	0.29	25	101	
[Pb]	207	He	25.415	2.216	93364	0.85	25	102	
Pb	208	He	25.474	1.763	426913	0.37	25	102	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	46304	0.84	46942	98.64	30	120	
Lu	175	He	1764868	1.38	1786880	98.77	30	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB
Data File Name	005_ICB.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T11:32:32-08:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	001CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Zn	66	He	0.098	45.7	43	26.6	1	
[Pb]	206	He	0.003	103.1	32	33.3	0.1	
[Pb]	207	He	0.004	76.9	27	45.1	0.1	
Pb	208	He	0.005	14.2	162	6.6	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	46213	2.84	46942	98.45	30	120	
Lu	175	He	1758957	0.55	1786880	98.44	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	006_CCB.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T11:34:41-08:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	001CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Zn	66	He	0.037	137.6	29	40.5	1	
[Pb]	206	He	-0.001	-158.2	17	52.9	0.1	
[Pb]	207	He	0.001	426.2	13	66.1	0.1	
Pb	208	He	0.000	-478.1	80	38.2	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	45732	1.38	46942	97.42	30	120	
Lu	175	He	1795042	1.44	1786880	100.46	30	120	

Low Level Initial Calibration Verification (LLICV) Report

Sample Table

Sample Name	LLICVS
Data File Name	007LICV.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T11:36:50-08:00
Sample Type	LLICV
Dilution	1
Comment	
ISTD Ref File Name	001CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

Sue Penner 01/25/17

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Zn	66	He	1.027	8.245	257	7.23	1	103	
[Pb]	206	He	0.127	10.969	541	10.71	0.1	127	
[Pb]	207	He	0.116	23.634	447	22.77	0.1	116	
Pb	208	He	0.121	4.226	2152	3.55	0.1	121	LLICV Failed

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	46511	0.93	46942	99.08	30	120	
Lu	175	He	1805087	0.53	1786880	101.02	30	120	

Low Level Initial Calibration Verification (LLICV) Report

Sample Table

Sample Name	LLICVS
Data File Name	008LICV.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T11:39:10-08:00
Sample Type	LLICV
Dilution	1
Comment	
ISTD Ref File Name	001CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Zn	66	He	1.043	27.876	260	25.93	1	104	
[Pb]	206	He	0.113	9.713	488	9.18	0.1	113	
[Pb]	207	He	0.125	14.264	484	15.27	0.1	125	
Pb	208	He	0.116	5.366	2102	6.24	0.1	116	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	46417	0.28	46942	98.88	30	120	
Lu	175	He	1822100	1.29	1786880	101.97	30	120	

Sample Report

Sample Table

Sample Name	LRSTD
Data File Name	009SMPL.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T11:41:20-08:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	001CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Zn	66	He	1016.644	1.15	226928	0.45	
[Pb]	206	He	1088.484	1.79	4340067	0.03	
[Pb]	207	He	1057.566	0.26	3888033	0.03	
Pb	208	He	1057.391	1.56	17731805	0.01	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	45209	1.13	46942	96.31	30	120	
Lu	175	He	1766131	0.76	1786880	98.84	30	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA
Data File Name	010ICSA.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T11:43:30-08:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	001CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	QC Flag
Zn	66	He	0.512	22.5	120	21.0	
[Pb]	206	He	0.205	6.4	772	6.2	
[Pb]	207	He	0.195	1.7	670	1.3	
Pb	208	He	0.195	4.3	3095	3.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	40199	1.99	46942	85.64	30	120	
Lu	175	He	1628079	1.18	1786880	91.11	30	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB
Data File Name	011ICSB.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T11:45:38-08:00
Sample Type	ICSB
Dilution	1
Comment	
ISTD Ref File Name	001CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Zn	66	He	21.188	5.116	4166	4.94	25	84.8	
[Pb]	206	He	0.153	8.117	599	8.45	-1	-15.3	
[Pb]	207	He	0.137	13.777	489	12.98	-1	-13.7	
Pb	208	He	0.139	4.734	2301	4.63	-1	-13.9	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	39656	0.33	46942	84.48	30	120	
Lu	175	He	1677694	0.80	1786880	93.89	30	120	

Prep Blank (PB) Report

Sample Table

Sample Name	KQ1700722-01
Data File Name	012_PB.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T11:47:48-08:00
Sample Type	PB
Dilution	1
Comment	5
ISTD Ref File Name	001CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Zn	66	He	0.296	25.6	83	18.3	1	
[Pb]	206	He	0.017	16.1	88	11.0	0.1	
[Pb]	207	He	0.012	48.7	54	37.4	0.1	
Pb	208	He	0.015	16.2	322	11.4	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	43665	1.38	46942	93.02	30	120	
Lu	175	He	1719100	1.76	1786880	96.21	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	KQ1700722-02
Data File Name	013_LCS.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T11:50:01-08:00
Sample Type	LCS
Dilution	1
Comment	20
ISTD Ref File Name	001CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Zn	66	He	55.049	3.016	12409	2.82	50	110.1	
[Pb]	206	He	49.756	0.857	198076	0.63	50	99.5	
[Pb]	207	He	51.377	1.549	188560	0.70	50	102.8	
Pb	208	He	50.506	1.417	845590	0.46	50	101.0	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	45582	0.59	46942	97.10	30	120	
Lu	175	He	1763190	1.19	1786880	98.67	30	120	

All Reference Sample Report

Sample Table

Sample Name	K1700524-001
Data File Name	014_ARF.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T11:52:11-08:00
Sample Type	AllRef
Dilution	1
Comment	5
ISTD Ref FileName	001CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Zn	66	He	100.158	1.52	22980	0.44	
[Pb]	206	He	166.419	0.75	670924	0.02	
[Pb]	207	He	158.057	1.29	587493	0.03	
Pb	208	He	162.124	1.04	2748903	0.01	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	46428	0.48	46942	98.91	30	120	
Lu	175	He	1785737	1.22	1786880	99.94	30	120	

Sample Report

Sample Table

Sample Name	K1700524-001L
Data File Name	015SMPL.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T11:54:20-08:00
Sample Type	Sample
Dilution	1
Comment	25
ISTD Ref FileName	001CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Zn	66	He	20.455	3.96	4768	0.43	
[Pb]	206	He	33.487	2.84	138271	0.02	
[Pb]	207	He	32.273	2.03	122872	0.03	
Pb	208	He	32.761	2.01	568990	0.01	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	47002	0.79	46942	100.13	30	120	
Lu	175	He	1829420	2.50	1786880	102.38	30	120	

Post Digestion Spike Sample (PDS) Report

Sample Table

Sample Name	K1700524-001A
Data File Name	016_PDS.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T11:56:28-08:00
Sample Type	PDS
Dilution	1
Comment	5
QC Ref File Name	014_ARF.d
ISTD Ref File Name	001CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Spk Amt	%Rec	QC Flag
Zn	66	He	145.866	1.182	33736	1.37	50	91	
[Pb]	206	He	211.673	1.405	872412	0.18	50	91	
[Pb]	207	He	203.658	1.589	773902	0.42	50	91	
Pb	208	He	209.005	1.468	3622952	0.35	50	94	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	46814	0.37	46942	99.73	30	120	
Lu	175	He	1825757	1.57	1786880	102.18	30	120	

Matrix Spike Sample (MS) Report

Sample Table

Sample Name	K1700524-001S
Data File Name	017_Spk.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T11:58:37-08:00
Sample Type	Spike
Dilution	1
Comment	5
QC Ref File Name	014_ARF.d
ISTD Ref File Name	001CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Spk Amt	%Rec	QC Flag
Zn	66	He	285.949	1.080	64690	1.20	200	93	
[Pb]	206	He	379.440	0.792	1527647	1.73	200	107	
[Pb]	207	He	367.913	1.227	1365546	0.27	200	105	
Pb	208	He	367.668	0.944	6225050	0.37	200	103	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	45806	0.74	46942	97.58	30	120	
Lu	175	He	1783148	0.96	1786880	99.79	30	120	

Matrix Spike Sample (MS) Report

Sample Table

Sample Name	K1700524-001SD
Data File Name	018_Spk.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T12:00:47-08:00
Sample Type	Spike
Dilution	1
Comment	5
QC Ref File Name	014_ARF.d
ISTD Ref File Name	001CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Spk Amt	%Rec	QC Flag
Zn	66	He	276.491	1.078	63032	1.21	200	88	
[Pb]	206	He	403.264	3.717	1606689	3.66	200	118	
[Pb]	207	He	384.499	0.967	1412444	0.47	200	113	
Pb	208	He	388.733	1.654	6513750	1.05	200	113	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	46157	0.13	46942	98.33	30	120	
Lu	175	He	1764840	1.35	1786880	98.77	30	120	

Sample Report

Sample Table

Sample Name	K1700524-002
Data File Name	019SMPL.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T12:02:56-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	001CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Zn	66	He	123.507	2.31	27540	0.45	
[Pb]	206	He	81.486	1.18	321687	0.03	
[Pb]	207	He	78.058	0.55	284128	0.03	
Pb	208	He	79.629	1.10	1322162	0.01	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	45146	2.50	46942	96.17	30	120	
Lu	175	He	1748504	0.78	1786880	97.85	30	120	

Sample Report

Sample Table

Sample Name	K1700524-003
Data File Name	020SMPL.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T12:05:06-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	001CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Zn	66	He	122.697	1.49	28242	0.43	
[Pb]	206	He	176.244	2.66	712411	0.02	
[Pb]	207	He	166.720	2.06	621409	0.03	
Pb	208	He	172.069	1.16	2925879	0.01	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	46582	0.65	46942	99.23	30	120	
Lu	175	He	1790961	1.94	1786880	100.23	30	120	

Sample Report

Sample Table

Sample Name	K1700524-004
Data File Name	021SMPL.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T12:07:16-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	001CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Zn	66	He	114.932	1.11	26656	0.43	
[Pb]	206	He	133.230	0.96	551753	0.02	
[Pb]	207	He	127.337	0.98	486231	0.03	
Pb	208	He	129.719	1.29	2259387	0.01	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	46939	0.39	46942	99.99	30	120	
Lu	175	He	1834350	1.01	1786880	102.66	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	022_CCV.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T12:09:26-08:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	001CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Zn	66	He	25.596	5.623	5934	6.24	25	102	
[Pb]	206	He	25.731	2.536	104746	1.45	25	103	
[Pb]	207	He	25.658	2.152	96299	1.01	25	103	
Pb	208	He	25.630	2.160	438828	0.92	25	103	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	46780	0.70	46942	99.66	30	120	
Lu	175	He	1803071	1.26	1786880	100.91	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	023_CCB.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T12:11:35-08:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	001CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Zn	66	He	0.073	58.2	38	27.0	1	
[Pb]	206	He	0.011	38.3	69	24.4	0.1	
[Pb]	207	He	0.009	17.5	44	11.5	0.1	
Pb	208	He	0.009	26.6	241	20.0	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	46522	1.17	46942	99.11	30	120	
Lu	175	He	1820513	2.92	1786880	101.88	30	120	

Sample Report

Sample Table

Sample Name	K1700524-005
Data File Name	024SMPL.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T12:13:44-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	001CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Zn	66	He	130.903	0.58	30517	0.43	
[Pb]	206	He	142.486	1.26	586520	0.02	
[Pb]	207	He	135.571	2.02	514469	0.03	
Pb	208	He	138.712	1.66	2401313	0.01	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	47186	1.79	46942	100.52	30	120	
Lu	175	He	1823544	2.42	1786880	102.05	30	120	

Sample Report

Sample Table

Sample Name	K1700528-001
Data File Name	025SMPL.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T12:15:53-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	001CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Zn	66	He	71.033	2.33	16521	0.43	
[Pb]	206	He	48.214	1.46	196333	0.02	
[Pb]	207	He	45.029	2.13	169047	0.03	
Pb	208	He	46.358	1.35	793958	0.01	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	47047	0.18	46942	100.22	30	120	
Lu	175	He	1803715	1.46	1786880	100.94	30	120	

Sample Report

Sample Table

Sample Name	K1700528-002
Data File Name	026SMPL.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T12:18:02-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	001CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Zn	66	He	80.240	2.66	19007	0.42	
[Pb]	206	He	238.289	2.02	968430	0.02	
[Pb]	207	He	229.281	1.36	859199	0.03	
Pb	208	He	233.781	1.15	3996351	0.01	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	47919	0.38	46942	102.08	30	120	
Lu	175	He	1800431	1.77	1786880	100.76	30	120	

Sample Report

Sample Table

Sample Name	K1700528-003
Data File Name	027SMPL.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T12:20:11-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	001CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Zn	66	He	73.395	1.12	16755	0.44	
[Pb]	206	He	416.568	0.90	1692114	0.02	
[Pb]	207	He	382.540	0.65	1432688	0.03	
Pb	208	He	393.208	0.91	6717494	0.01	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	46179	0.09	46942	98.37	30	120	
Lu	175	He	1799131	0.49	1786880	100.69	30	120	

Sample Report

Sample Table

Sample Name	K1700528-004
Data File Name	028SMPL.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T12:22:21-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	001CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Zn	66	He	55.437	1.05	13311	0.42	
[Pb]	206	He	43.488	1.81	181403	0.02	
[Pb]	207	He	41.020	1.88	157758	0.03	
Pb	208	He	41.883	1.83	734800	0.01	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	48550	0.68	46942	103.43	30	120	
Lu	175	He	1847564	0.82	1786880	103.40	30	120	

Sample Report

Sample Table

Sample Name	K1700528-005
Data File Name	029SMPL.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T12:24:32-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	001CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Zn	66	He	58.579	1.20	13830	0.42	
[Pb]	206	He	53.091	0.53	219256	0.02	
[Pb]	207	He	50.189	1.45	191102	0.03	
Pb	208	He	51.545	1.15	895312	0.01	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	47744	0.33	46942	101.71	30	120	
Lu	175	He	1829019	0.19	1786880	102.36	30	120	

Sample Report

Sample Table

Sample Name	K1700528-006
Data File Name	030SMPL.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T12:26:41-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	001CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Zn	66	He	88.347	1.68	21301	0.41	
[Pb]	206	He	541.312	2.14	2282138	0.02	
[Pb]	207	He	511.029	2.22	1986700	0.03	
Pb	208	He	512.670	1.20	9090678	0.01	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	48786	0.69	46942	103.93	30	120	
Lu	175	He	1867493	0.97	1786880	104.51	30	120	

Sample Report

Sample Table

Sample Name	K1700528-007
Data File Name	031SMPL.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T12:28:50-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	001CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

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QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Zn	66	He	124.979	0.39	29818	0.42	
[Pb]	206	He	1212.935	2.77	5027497	0.02	>LDR
[Pb]	207	He	1146.117	1.38	4381271	0.03	>LDR
Pb	208	He	1161.793	2.60	20253194	0.01	>LDR

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QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	48289	1.87	46942	102.87	30	120	
Lu	175	He	1836641	2.39	1786880	102.78	30	120	

Sample Report

Sample Table

Sample Name	K1700528-008
Data File Name	032SMPL.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T12:31:01-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	001CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Zn	66	He	120.366	2.12	28533	0.42	
[Pb]	206	He	122.661	0.91	516623	0.02	
[Pb]	207	He	117.873	0.56	457724	0.03	
Pb	208	He	119.504	0.58	2116898	0.01	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	47979	0.89	46942	102.21	30	120	
Lu	175	He	1865436	0.67	1786880	104.40	30	120	

Sample Report

Sample Table

Sample Name	K1700528-009
Data File Name	033SMPL.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T12:33:10-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	001CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Zn	66	He	71.675	3.14	16631	0.43	
[Pb]	206	He	114.600	0.37	470709	0.02	
[Pb]	207	He	109.162	0.34	413394	0.03	
Pb	208	He	111.703	0.41	1929683	0.01	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	46943	1.95	46942	100.00	30	120	
Lu	175	He	1819165	0.81	1786880	101.81	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	034_CCV.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T12:35:19-08:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	001CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Zn	66	He	25.600	1.671	6230	2.28	25	102	
[Pb]	206	He	25.210	1.097	107406	0.61	25	101	
[Pb]	207	He	24.741	2.202	97170	1.02	25	99	
Pb	208	He	24.809	1.616	444513	0.13	25	99	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	49111	0.62	46942	104.62	30	120	
Lu	175	He	1886918	1.71	1786880	105.60	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	035_CCB.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T12:37:29-08:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	001CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Zn	66	He	0.051	145.6	33	52.0	1	
[Pb]	206	He	0.015	31.2	89	22.6	0.1	
[Pb]	207	He	0.019	11.0	84	9.9	0.1	
Pb	208	He	0.016	13.1	376	9.8	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	47712	0.50	46942	101.64	30	120	
Lu	175	He	1877643	0.42	1786880	105.08	30	120	

Sample Report

Sample Table

Sample Name	K1700530-001
Data File Name	036SMPL.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T12:39:38-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	001CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Zn	66	He	132.119	1.45	30893	0.43	
[Pb]	206	He	216.337	1.66	880285	0.02	
[Pb]	207	He	206.221	2.41	773619	0.03	
Pb	208	He	210.184	1.35	3597260	0.01	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	47330	1.58	46942	100.83	30	120	
Lu	175	He	1802628	1.97	1786880	100.88	30	120	

Sample Report

Sample Table

Sample Name	K1700530-002
Data File Name	037SMPL.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T12:41:48-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	001CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Zn	66	He	84.342	1.81	17899	0.47	
[Pb]	206	He	7204.827	0.83	28827293	0.02	>LDR
[Pb]	207	He	6373.541	1.00	23511837	0.03	>LDR
~~Pb~~	~~208~~	~~He~~	~~6631.892~~	~~0.55~~	~~111602213~~	~~0.01~~	~~>LDR~~

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QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	42942	1.08	46942	91.48	30	120	
Lu	175	He	1772279	1.87	1786880	99.18	30	120	

Sample Report

Sample Table

Sample Name	K1700530-003
Data File Name	038SMPL.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T12:43:57-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	001CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Zn	66	He	119.335	1.49	24749	0.48	
[Pb]	206	He	536.461	2.77	2104816	0.03	
[Pb]	207	He	497.119	0.59	1798929	0.03	
Pb	208	He	502.707	1.24	8297403	0.01	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	41973	1.13	46942	89.41	30	120	
Lu	175	He	1738535	2.22	1786880	97.29	30	120	

Sample Report

Sample Table

Sample Name	K1700528-007
Data File Name	039SMPL.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T12:46:07-08:00
Sample Type	Sample
Dilution	1
Comment	100
ISTD Ref FileName	001CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Zn	66	He	5.656	4.13	1330	0.43	
[Pb]	206	He	54.448	1.96	225754	0.02	
[Pb]	207	He	52.565	2.79	200913	0.03	
Pb	208	He	53.226	2.37	928124	0.01	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	46890	0.95	46942	99.89	30	120	
Lu	175	He	1836936	2.69	1786880	102.80	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	040_CCV.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T12:48:16-08:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	001CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Zn	66	He	25.398	2.261	5829	1.91	25	102	
[Pb]	206	He	26.054	3.099	106898	0.84	25	104	
[Pb]	207	He	25.504	2.752	96477	0.28	25	102	
Pb	208	He	25.609	2.847	441916	0.27	25	102	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	46318	0.78	46942	98.67	30	120	
Lu	175	He	1817938	2.79	1786880	101.74	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	041_CCB.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T12:52:06-08:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	001CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Zn	66	He	0.088	50.0	41	24.8	1	
[Pb]	206	He	0.027	14.4	136	13.5	0.1	
[Pb]	207	He	0.032	16.4	136	16.4	0.1	
Pb	208	He	0.028	6.6	573	7.3	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	46453	0.51	46942	98.96	30	120	
Lu	175	He	1836423	1.68	1786880	102.77	30	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLCCVS
Data File Name	042LCCV.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T12:54:16-08:00
Sample Type	LLCCV
Dilution	1
Comment	
ISTD Ref File Name	001CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Zn	66	He	1.023	20.998	251	16.91	1	102	
[Pb]	206	He	0.130	14.611	546	15.51	0.1	130	
[Pb]	207	He	0.141	9.538	534	10.84	0.1	141	
Pb	208	He	0.141	3.794	2481	4.83	0.1	141	LLCCV Failed

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QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	45792	2.58	46942	97.55	30	120	
Lu	175	He	1785277	1.69	1786880	99.91	30	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLCCVS
Data File Name	043LCCV.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T12:56:25-08:00
Sample Type	LLCCV
Dilution	1
Comment	
ISTD Ref File Name	001CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

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QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Zn	66	He	1.090	14.003	266	13.19	1	109	
[Pb]	206	He	0.128	11.529	549	10.89	0.1	128	
[Pb]	207	He	0.137	3.071	531	3.68	0.1	137	
Pb	208	He	0.136	8.018	2443	7.57	0.1	136	LLCCV Failed

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	45548	0.27	46942	97.03	30	120	
Lu	175	He	1821100	1.00	1786880	101.92	30	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLCCVS
Data File Name	044LCCV.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T13:01:01-08:00
Sample Type	LLCCV
Dilution	1
Comment	
ISTD Ref File Name	001CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

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QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Zn	66	He	0.841	1.934	209	1.84	1	84	
[Pb]	206	He	0.122	6.566	526	5.39	0.1	122	
[Pb]	207	He	0.100	7.207	392	5.97	0.1	100	
Pb	208	He	0.112	4.311	2021	3.34	0.1	112	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	45412	0.10	46942	96.74	30	120	
Lu	175	He	1822486	1.02	1786880	101.99	30	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLCCVS 1.0 ppb
Data File Name	045_QC1.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T13:03:10-08:00
Sample Type	QC1
Dilution	1
Comment	
ISTD Ref File Name	001CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

Wrong QC Table

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Zn	66	He	1.386	10.931	333	9.54	2	69	QC1 Main CR1 Failed
[Pb]	206	He	1.165	1.980	4745	1.13	0.2	583	QC1 Main CR1 Failed
[Pb]	207	He	1.165	2.641	4367	3.12	0.2	583	QC1 Main CR1 Failed
Pb	208	He	1.166	0.550	19976	1.27	0.2	583	QC1 Main CR1 Failed

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QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	45747	1.35	46942	97.45	30	120	
Lu	175	He	1795705	0.99	1786880	100.49	30	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLCCVS 1.0 ppb
Data File Name	046_QC1.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T13:05:20-08:00
Sample Type	QC1
Dilution	1
Comment	
ISTD Ref File Name	001CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

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QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Zn	66	He	1.594	18.766	381	18.21	2	80	
[Pb]	206	He	1.194	2.412	4870	1.71	0.2	597	QC1 Main CR1 Failed
[Pb]	207	He	1.174	4.436	4407	4.82	0.2	587	QC1 Main CR1 Failed
Pb	208	He	1.172	1.589	20105	2.13	0.2	586	QC1 Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	45773	0.52	46942	97.51	30	120	
Lu	175	He	1798958	0.97	1786880	100.68	30	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLCCVS 1.0 ppb
Data File Name	047_QC1.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T13:08:20-08:00
Sample Type	QC1
Dilution	1
Comment	
ISTD Ref File Name	001CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

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QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Zn	66	He	1.300	25.679	316	25.36	1	130	
[Pb]	206	He	1.158	2.739	4741	1.30	1	116	
[Pb]	207	He	1.222	1.677	4603	0.11	1	122	
Pb	208	He	1.192	2.341	20511	1.31	1	119	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	45848	2.24	46942	97.67	30	120	
Lu	175	He	1805233	1.67	1786880	101.03	30	120	

Sample Report

Sample Table

Sample Name	K1700530-002
Data File Name	048SMPL.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T13:11:27-08:00
Sample Type	Sample
Dilution	1
Comment	500
ISTD Ref FileName	001CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Zn	66	He	0.891	3.25	226	0.40	
[Pb]	206	He	56.163	2.06	232148	0.02	
[Pb]	207	He	51.175	1.45	195036	0.03	
Pb	208	He	52.972	1.44	920944	0.01	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	46519	0.23	46942	99.10	30	120	
Lu	175	He	1831006	1.56	1786880	102.47	30	120	

Prep Blank (PB) Report

Sample Table

Sample Name	KQ1700728-01
Data File Name	049_PB.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T13:13:36-08:00
Sample Type	PB
Dilution	1
Comment	5
ISTD Ref File Name	001CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Zn	66	He	0.353	15.0	103	12.9	1	
[Pb]	206	He	0.019	31.4	102	24.9	0.1	
[Pb]	207	He	0.028	4.1	118	3.3	0.1	
Pb	208	He	0.022	9.6	476	8.4	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	47146	1.21	46942	100.43	30	120	
Lu	175	He	1838324	0.50	1786880	102.88	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	KQ1700728-02
Data File Name	050_LCS.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T13:15:45-08:00
Sample Type	LCS
Dilution	1
Comment	20
ISTD Ref File Name	001CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Zn	66	He	56.277	0.337	13257	1.31	50	112.6	
[Pb]	206	He	48.664	0.738	206268	0.52	50	97.3	
[Pb]	207	He	49.772	1.182	194498	0.76	50	99.5	
Pb	208	He	49.049	0.927	874370	0.47	50	98.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	47635	1.16	46942	101.48	30	120	
Lu	175	He	1877289	1.06	1786880	105.06	30	120	

All Reference Sample Report

Sample Table

Sample Name	K1700531-001
Data File Name	051_ARF.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T13:17:54-08:00
Sample Type	AllRef
Dilution	1
Comment	5
ISTD Ref FileName	001CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Zn	66	He	230.077	2.10	52674	0.44	
[Pb]	206	He	63.936	0.45	262331	0.02	
[Pb]	207	He	60.911	0.28	230424	0.03	
Pb	208	He	62.256	0.58	1074315	0.01	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	46366	2.54	46942	98.77	30	120	
Lu	175	He	1817228	0.60	1786880	101.70	30	120	

Sample Report

Sample Table

Sample Name	K1700531-001L
Data File Name	052SMPL.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T13:20:04-08:00
Sample Type	Sample
Dilution	1
Comment	25
ISTD Ref FileName	001CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Zn	66	He	47.906	2.57	11246	0.43	
[Pb]	206	He	13.762	3.11	57074	0.02	
[Pb]	207	He	13.196	2.20	50458	0.03	
Pb	208	He	13.424	3.04	234148	0.01	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	47465	1.31	46942	101.11	30	120	
Lu	175	He	1837086	2.49	1786880	102.81	30	120	

Post Digestion Spike Sample (PDS) Report

Sample Table

Sample Name	K1700531-001A
Data File Name	053_PDS.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T13:22:14-08:00
Sample Type	PDS
Dilution	1
Comment	5
QC Ref File Name	051_ARF.d
ISTD Ref File Name	001CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Spk Amt	%Rec	QC Flag
Zn	66	He	272.708	3.000	63703	1.14	50	85	
[Pb]	206	He	114.467	1.432	468933	0.38	50	101	
[Pb]	207	He	110.876	1.265	418796	0.31	50	100	
Pb	208	He	112.557	1.272	1939390	0.67	50	101	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	47315	2.20	46942	100.79	30	120	
Lu	175	He	1814707	1.57	1786880	101.56	30	120	

Matrix Spike Sample (MS) Report

Sample Table

Sample Name	K1700531-001S
Data File Name	054_Spk.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T13:24:22-08:00
Sample Type	Spike
Dilution	1
Comment	5
QC Ref File Name	051_ARF.d
ISTD Ref File Name	001CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

X PDS is in control

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Spk Amt	%Rec	QC Flag
Zn	66	He	343.451	1.993	80849	0.48	200	57	Flag
[Pb]	206	He	236.550	1.578	980059	1.65	200	86	
[Pb]	207	He	238.819	1.865	912222	1.26	200	89	
Pb	208	He	238.954	2.482	4163021	0.66	200	88	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	47677	2.05	46942	101.57	30	120	
Lu	175	He	1835658	3.14	1786880	102.73	30	120	

Matrix Spike Sample (MS) Report

Sample Table

Sample Name	K1700531-001SD
Data File Name	055_Spk.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T13:26:31-08:00
Sample Type	Spike
Dilution	1
Comment	5
QC Ref File Name	051_ARF.d
ISTD Ref File Name	001CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

PDS is in control

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Spk Amt	%Rec	QC Flag
Zn	66	He	346.888	1.003	79724	1.64	200	58	Flag
[Pb]	206	He	233.012	0.676	948737	0.41	200	85	
[Pb]	207	He	233.960	0.551	878314	0.72	200	87	
Pb	208	He	234.046	0.472	4008004	0.70	200	86	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	46534	0.73	46942	99.13	30	120	
Lu	175	He	1803433	0.57	1786880	100.93	30	120	

Sample Report

Sample Table

Sample Name	K1700531-002
Data File Name	056SMPL.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T13:28:41-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	001CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Zn	66	He	173.758	1.74	41128	0.42	
[Pb]	206	He	47.366	0.21	197250	0.02	
[Pb]	207	He	44.954	0.89	172588	0.03	
Pb	208	He	46.006	0.99	805720	0.01	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	47921	1.16	46942	102.09	30	120	
Lu	175	He	1844308	1.13	1786880	103.21	30	120	

Sample Report

Sample Table

Sample Name	K1700531-003
Data File Name	057SMPL.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T13:30:49-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	001CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Zn	66	He	199.878	1.63	48450	0.41	
[Pb]	206	He	99.726	1.57	420172	0.02	
[Pb]	207	He	94.462	1.71	366936	0.03	
Pb	208	He	97.334	1.64	1724782	0.01	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	49078	1.10	46942	104.55	30	120	
Lu	175	He	1866429	2.01	1786880	104.45	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	058_CCV.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T13:32:58-08:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	001CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Zn	66	He	25.734	2.739	6308	3.96	25	103	
[Pb]	206	He	25.451	0.725	108798	0.39	25	102	
[Pb]	207	He	25.637	2.229	101025	1.23	25	103	
Pb	208	He	25.433	1.191	457244	0.31	25	102	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	49461	1.78	46942	105.37	30	120	
Lu	175	He	1893108	0.99	1786880	105.94	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	059_CCB.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T13:35:08-08:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	001CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Zn	66	He	0.081	22.5	41	9.4	1	
[Pb]	206	He	0.018	13.8	101	10.1	0.1	
[Pb]	207	He	0.015	5.6	72	5.3	0.1	
Pb	208	He	0.017	13.3	406	8.3	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	48450	1.89	46942	103.21	30	120	
Lu	175	He	1911030	2.26	1786880	106.95	30	120	

Sample Report

Sample Table

Sample Name	K1700531-004
Data File Name	060SMPL.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T13:37:20-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	001CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Zn	66	He	245.621	1.61	58499	0.42	
[Pb]	206	He	91.106	1.75	387763	0.02	
[Pb]	207	He	86.873	1.41	340913	0.03	
Pb	208	He	88.881	1.18	1591136	0.01	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	48224	1.31	46942	102.73	30	120	
Lu	175	He	1885411	1.56	1786880	105.51	30	120	

Sample Report

Sample Table

Sample Name	K1700531-005
Data File Name	061SMPL.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T13:39:28-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	001CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Zn	66	He	129.785	0.94	32376	0.40	
[Pb]	206	He	91.133	3.25	391897	0.02	
[Pb]	207	He	86.104	1.10	341479	0.03	
Pb	208	He	88.700	2.33	1604427	0.01	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	50490	0.42	46942	107.56	30	120	
Lu	175	He	1905365	1.87	1786880	106.63	30	120	

Sample Report

Sample Table

Sample Name	K1700531-006
Data File Name	062SMPL.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T13:41:37-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	001CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Zn	66	He	178.267	2.44	42212	0.42	
[Pb]	206	He	45.055	2.62	189329	0.02	
[Pb]	207	He	43.383	3.10	168070	0.03	
Pb	208	He	44.080	2.75	779043	0.01	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	47940	0.88	46942	102.13	30	120	
Lu	175	He	1861496	1.44	1786880	104.18	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	063_CCV.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T13:43:47-08:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	001CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Zn	66	He	25.463	1.750	6416	0.60	25	102	
[Pb]	206	He	25.061	0.424	110812	1.39	25	100	
[Pb]	207	He	24.706	1.153	100704	0.79	25	99	
Pb	208	He	24.801	1.009	461178	0.81	25	99	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	50862	2.07	46942	108.35	30	120	
Lu	175	He	1958175	1.82	1786880	109.59	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	064_CCB.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T13:45:57-08:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	001CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Zn	66	He	0.130	22.8	54	12.7	1	
[Pb]	206	He	0.008	42.2	59	26.8	0.1	
[Pb]	207	He	0.017	7.3	81	8.6	0.1	
Pb	208	He	0.015	15.1	362	12.0	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	50027	0.83	46942	106.57	30	120	
Lu	175	He	1903289	2.45	1786880	106.51	30	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLCCVS
Data File Name	065LCCV.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T13:48:06-08:00
Sample Type	LLCCV
Dilution	1
Comment	
ISTD Ref File Name	001CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Zn	66	He	1.167	11.140	306	10.14	1	117	
[Pb]	206	He	0.107	17.197	479	14.10	0.1	107	
[Pb]	207	He	0.098	13.717	400	13.02	0.1	98	
~~Rb~~	~~208~~	~~He~~	~~0.106~~	~~9.840~~	~~1992~~	~~8.09~~	~~0.1~~	~~106~~	

1/26/17

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	49194	0.22	46942	104.80	30	120	
Lu	175	He	1894052	2.45	1786880	106.00	30	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLCCVS
Data File Name	066LCCV.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T13:50:16-08:00
Sample Type	LLCCV
Dilution	1
Comment	
ISTD Ref File Name	001CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

1/26/17

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Zn	66	He	1.186	9.275	304	7.77	1	119	
[Pb]	206	He	0.116	0.799	522	2.24	0.1	116	
[Pb]	207	He	0.098	7.354	402	8.78	0.1	98	
Pb	208	He	0.103	1.886	1965	1.97	0.1	103	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	48309	0.85	46942	102.91	30	120	
Lu	175	He	1908518	1.63	1786880	106.81	30	120	

Sample Report

Sample Table

Sample Name	LLCCVS 1.0 ppb
Data File Name	067SMPL.d
Data Path Name	D:\Data\Experiments\012517B2.b
Acq Date Time	2017-01-25T13:52:26-08:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	001CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Zn	66	He	3.205	4.38	790	0.41	
[Pb]	206	He	1.124	3.94	4702	0.02	
[Pb]	207	He	1.102	5.99	4239	0.03	
Pb	208	He	1.094	4.36	19233	0.01	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	48558	0.93	46942	103.44	30	120	
Lu	175	He	1844160	1.98	1786880	103.21	30	120	

LABORATORY DATA CONSULTANTS, INC.
2701 Loker Ave. West, Suite 220, Carlsbad, CA 92010 Bus: 760-827-1100 Fax: 760-827-1099

ARCADIS U.S., Inc.
401 E. Main Street, Suite 400
El Paso, TX 79901

February 14, 2017

SUBJECT: Fort Bliss, Castner Range, Data Validation

Enclosed are the final validation reports for the fraction listed below. These SDGs were received on February 2, 2017. Attachment 1 is a summary of the samples that were reviewed for analysis.

LDC Project #38037:

SDG #	**Fraction:**
K1700524, K1700528 K1700530, K1700531	Metals

The data validation was performed under Level III & IV guidelines. The analyses were validated using the following documents, as applicable to each method:

- Final Quality Assurance Project Plan, Military Munitions Response Program Remedial Investigation, Closed Castner Firing Range, Fort Bliss, El Paso, Texas, February 2015
- U.S. Department of Defense Quality Systems Manual for Environmental Laboratories, 5.0, July 2013
- USEPA, Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review, October 2004
- EPA SW 846, Third Edition, Test Methods for Evaluating Solid Waste, update 1, July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III, December 1996; update IIIA, April 1998; IIIB, November 2004; update IV, February 2007; update V, July 2014

Please feel free to contact us if you have any questions.

Sincerely,

EDD 90/10 ADR/IV

LDC #38037 (Arcadis-Millersville, MD / Fort Bliss, Castner Range)

LDC	SDG#	DATE REC'D	(2) DATE DUE	Pb (6020A)		Zn (6020A)																															
Matrix:	Water/Soil			W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S
A	K1700524	02/02/17	02/16/17	0	5	-	-																														
B	K1700528	02/02/17	02/16/17	0	9	-	-																														
C	K1700530	02/02/17	02/16/17	0	3	-	-																														
D	K1700531	02/02/17	02/16/17	-	-	0	6																														
Total	T/PG			0	17	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23

Shaded cells indicate Level IV validation (all other cells are ADR validation). These sample counts do not include MS/MSD, and DUPs

L:\Arcadis\Fort Bliss-Castner Range\38037ST.wpd

Data Validation Report
Fort Bliss, Castner Range

SDG: K1700524, K1700528, K1700530, and K1700531

Prepared for

Arcadis U.S., Inc.
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El Paso, TX 79901

Prepared by

Laboratory Data Consultants, Inc.
2701 Loker Ave West, Suite 220
Carlsbad, CA 92010

February 10, 2017

INTRODUCTION

This Data Validation Report (DVR) presents Level III and Level IV data validation results for samples collected during the January 2017 sampling period. Data validation was performed in accordance with the Final Quality Assurance Project Plan (QAPP), Military Munitions Response Program Remedial Investigation, Closed Castner Firing Range, Fort Bliss, El Paso, Texas (February 2015), the U.S. Department of Defense (DoD) Quality Systems Manual (QSM) for Environmental Laboratories, Version 5.0 (July 2013), and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines (CLPNFG) for Inorganic Superfund Data Review (October 2004). Where specific guidance is not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Metals by Environmental Protection Agency (EPA) SW 846 Method 6020A

The sample identification and methods of analyses performed on each sample is presented in Attachment 1. Overall data qualification summary is presented in Attachment 2. Level III Automated Data Review outliers are presented in Enclosure I. DVRs for samples on which Level IV validation was performed are presented in Enclosure II.

All sample results were subjected to Level III data validation, which comprises an evaluation of quality control (QC) summary results for sample holding times, instrument performance check, initial and continuing calibrations, laboratory blanks, initial and continuing calibration blanks (ICB/CCBs), interference check (ICSA and ICSAB) samples, matrix spike/matrix spike duplicates (MS/MSD), serial dilutions, laboratory control sample (LCS), field duplicates, split duplicate samples, and internal standards. Approximately 13 percent of samples were subjected to Level IV evaluation as indicated in Attachment 1, which comprises a review of the QC summary forms as well as the raw data, to confirm sample quantitation and identification.

Automated data review was performed on all QC summary results using the Automated Data Review (ADR) software program (LDC, 2013) with exception of the instrument performance check, calibrations, interference check samples, and internal standards which were validated manually. Quality assurance (QA)/QC criteria specified in the QAPP, DoD QSM and CLPNFGs were incorporated with the program's reference library to assess compliance with project requirements.

The following are definitions of the data qualifiers:

J (Estimated): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated due to non-conformances discovered during data validation.

U (Non-detected): The compound or analyte was analyzed for and positively identified by the laboratory; however the analyte should be considered non-detect at the reported concentration due to the presence of contaminants detected in the associated blank(s).

UJ (Non-detected estimated): The compound or analyte was reported as not detected by the laboratory; however the reported quantitation/detection limit is estimated due to non-conformances discovered during data validation.

R (Rejected): The sample results were rejected due to gross non-conformances discovered during data validation. Data qualified as rejected is not usable.

NJ (Presumptive): Presumptive evidence of presence of the compound at an estimated quantity.

NA (Not applicable): Data did not warrant qualification since detected results only are affected and the compound was not detected in the associated samples.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

I. Sample Receipt & Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

II. Instrument Performance Check

Instrument performance was checked at the frequency required by the method.

All criteria for the instrument performance check were met.

III. Initial Calibration and Initial Calibration Verification

All criteria for the initial calibration and initial calibration verifications of the method were met.

IV. Continuing Calibration

All criteria for the continuing calibration verifications of the method were met.

V. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met.

VI. Laboratory Blanks

Laboratory blanks were performed as required by the methods. No contaminant concentrations were detected in the laboratory blanks reviewed by the ADR software.

VII. Field Blanks

No field blanks were identified in these SDGs.

VIII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were performed on an associated project sample. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the exception of zinc in one MS/MSD pair. No data were qualified for zinc MS/MSD %R outside QC limits when the serial dilution was within QC limits.

IX. Duplicate Sample Analysis

The laboratory has indicated that there were no duplicates (DUP) analyses specified for the samples in this SDG, and therefore duplicate analyses were not performed.

X. Serial Dilution

Serial dilution analysis was performed on an associated project sample. The analysis criteria

were met.

XI. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

XII. Field Duplicates/Split Samples

Three field duplicate pairs were collected and analyzed for metals. All RPDs were within QC limits with the exception of one duplicate pair for lead. The associated sample results were qualified as detected estimated (J). The field duplicate result comparisons are provided in Enclosure I.

Samples FTBL-SS-B066-0-6-011617 and FTBL-SS-B066-0-6-011617-QA (from SDG FA40440) were identified as split duplicate samples. No metals were detected in any of the split samples with the following exceptions:

Analyte	Concentration (mg/Kg)		RPD (≤50)	Qualifiers
	FTBL-SS-B066-0-6-011617 (SDG: K1700528)	FTBL-SS-B066-0-6-011617-QA (SDG: FA40440)		
Lead	18.6	48.8	90	J (all detects)

XIII. Internal Standards

All internal standard areas and percent recoveries were within QC limits.

XIV. Compound Quantitation

The laboratory reporting limits were evaluated. All laboratory reporting limits met the specified requirements.

XV. Overall Assessment of Data

The analysis was conducted within all specifications of the methods. No results were rejected in these SDGs.

Due to field duplicate RPD and split duplicate sample RPD, data were qualified as estimated in one sample.

The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable. Sample results that were found to be estimated (J) are usable for limited purposes only. Based upon the data validation all other results are considered valid and usable for all purposes.

Data flags are summarized and are presented as Attachment 2.

Attachment 1

Sample Cross Reference

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
16-Jan-2017	FD-011617-2	K1700524-005	FD	EPA 3050B	6020A	III
16-Jan-2017	FD-011617-1	K1700528-009	FD	EPA 3050B	6020A	III
16-Jan-2017	FTBL-SS-B066-0-6-011617	K1700528-001	FD	EPA 3050B	6020A	III
16-Jan-2017	FTBL-SS-B065-0-6-011617	K1700528-002	N	EPA 3050B	6020A	III
16-Jan-2017	FTBL-SS-B064-0-6-011617	K1700528-003	N	EPA 3050B	6020A	III
16-Jan-2017	FTBL-SS-B061-0-6-011617	K1700528-004	N	EPA 3050B	6020A	III
16-Jan-2017	FTBL-SS-B062-0-6-011617	K1700528-005	N	EPA 3050B	6020A	III
16-Jan-2017	FTBL-SS-B063-0-6-011617	K1700528-006	N	EPA 3050B	6020A	III
16-Jan-2017	FTBL-SS-B072-0-6-011617	K1700528-007	N	EPA 3050B	6020A	III
16-Jan-2017	FTBL-SS-B071-0-6-011617	K1700528-008	N	EPA 3050B	6020A	III
16-Jan-2017	FTBL-SS-B069-0-6-011617	K1700524-001	N	EPA 3050B	6020A	III
16-Jan-2017	FTBL-SS-B069-0-6-011617MS	KQ1700722-04	MS	EPA 3050B	6020A	III
16-Jan-2017	FTBL-SS-B068-0-6-011617	K1700524-002	N	EPA 3050B	6020A	III
16-Jan-2017	FTBL-SS-B067-0-6-011617	K1700524-003	N	EPA 3050B	6020A	III
16-Jan-2017	FTBL-SS-B070-0-6-011617	K1700524-004	N	EPA 3050B	6020A	III
17-Jan-2017	FD-011717-1	K1700531-006	FD	EPA 3050B	6020A	III
17-Jan-2017	FTBL-SS-B073-0-6-011717	K1700530-001	N	EPA 3050B	6020A	IV
17-Jan-2017	FTBL-SS-B075-0-6-011717	K1700530-002	N	EPA 3050B	6020A	IV
17-Jan-2017	FTBL-SS-B074-0-6-011717	K1700530-003	N	EPA 3050B	6020A	IV
17-Jan-2017	FTBL-SED-072-0-6-011717	K1700531-002	N	EPA 3050B	6020A	III
17-Jan-2017	FTBL-SED-073-0-6-011717	K1700531-001	N	EPA 3050B	6020A	III
17-Jan-2017	FTBL-SED-073-0-6-011717MS	KQ1700728-04	MS	EPA 3050B	6020A	III
17-Jan-2017	FTBL-SED-070-0-6-011717	K1700531-003	N	EPA 3050B	6020A	III
17-Jan-2017	FTBL-SED-071-0-6-011717	K1700531-004	N	EPA 3050B	6020A	III
17-Jan-2017	FTBL-SED-069-0-6-011717	K1700531-005	N	EPA 3050B	6020A	III

III = EPA Level 3 Data Review
IV = EPA Level 4 Data Validation
N = Normal Sample
FD = Field Duplicate
TB = Trip Blank
FB = Field Blank
MS = Matrix Spike
MSD = Matrix Spike Duplicate

Attachment 2

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: K1700524, K1700528, K1700530,

Laboratory: ALS_K

EDD Filename: K1700524_SEDD2A_rev, K1700528_SEDD2A_rev, K1700530_SEDD2A_rev, K1700531_SEDD2A_rev

eQAPP Name: Arcadis_FtBliss_ALS_160627

SDG: K1700528

Method Category: METALS

Method: 6020A ***Matrix:*** Soil

Sample ID: FD-011617-1 ***Collected:*** 1/16/2017 12:00:00 AM ***Analysis Type:*** Initial ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	50.0	=	0.04	LOD	0.45	LOQ	mg/Kg	J	Fd

Sample ID: FTBL-SS-B066-0-6-011617 ***Collected:*** 1/16/2017 2:24:00 PM ***Analysis Type:*** Initial ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	18.6	=	0.04	LOD	0.40	LOQ	mg/Kg	J	Fd

* denotes a non-reportable result

Project Name and Number: 06261038.0001.00400 - Closed Castner Firing Range

Data Qualifier Summary

Lab Reporting Batch ID: K1700524, K1700528, K1700530,

Laboratory: ALS_K

EDD Filename: K1700524_SEDD2A_rev, K1700528_SEDD2A_rev, K1700530_SEDD2A_rev, K1700531_SEDD2A_rev

eQAPP Name: Arcadis_FtBliss_ALS_160627

Reason Code Legend

Reason Code	*Description*
Fd	Field Duplicate Precision
Ms	Matrix Spike Lower Estimation

* denotes a non-reportable result

Project Name and Number: 06261038.0001.00400 - Closed Castner Firing Range

Enclosure I

Level III ADR Outliers

(Including Manual Review Outliers)

Quality Control
Outlier Reports

K1700524

Field Duplicate RPD Report

Lab Reporting Batch ID: K1700524 **Laboratory: ALS_K**

EDD Filename: K1700524_SEDD2A_rev **eQAPP Name: Arcadis_FtBliss_ALS_160627**

Method: 6020A
Matrix: Soil

Analyte	*Concentration (mg/Kg)*		*Sample RPD*	*eQAPP RPD*	*Flag*
	FTBL-SS-B070-0-6-011617 (Dry)	**FD-011617-2 (Dry)**			
LEAD	59.7	62.7	5	50.00	No Qualifiers Applied

Project Name and Number: 06261038.0001.00400 - Closed Castner Firing Range

LDC #: 38037A4a
SDG #: K1700524
Laboratory: ALS Environmental

VALIDATION COMPLETENESS WORKSHEET
ADR

Date: 8/30/17
Page: 1 of 1

METHOD: Lead (EPA SW 846 Method 6020A)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A /N	
II.	ICP/MS Tune	A	
III.	Instrument Calibration	A	
IV.	ICP Interference Check Sample (ICS) Analysis	A	
V.	Laboratory Blanks	A	ICB/CCB only
VI.	Field Blanks	N	
VII.	Matrix Spike/Matrix Spike Duplicates	N	
VIII.	Duplicate sample analysis	N	
IX.	Serial Dilution	A	
X.	Laboratory control samples	N	LCS
XI.	Field Duplicates	N	
XII.	Internal Standard (ICP-MS)	A	
XIII.	Sample Result Verification	N	
XIV	Overall Assessment of Data		

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank
SB=Source blank
OTHER:

	Client ID	Lab ID	Matrix	Date
1	FTBL-SS-B069-0-6-011617	K1700524-001	Soil	01/16/17
2	FTBL-SS-B068-0-6-011617	K1700524-002	Soil	01/16/17
3	FTBL-SS-B067-0-6-011617	K1700524-003	Soil	01/16/17
4	FTBL-SS-B070-0-6-011617	K1700524-004	Soil	01/16/17
5	FD-011617-2	K1700524-005	Soil	01/16/17
6	FTBL-SS-B069-0-6-011617MS	K1700524-001MS	Soil	01/16/17
7	FTBL-SS-B069-0-6-011617MSD	K1700524-001MSD	Soil	01/16/17
8				
9				
10				
11				
12				

Notes:

Quality Control
Outlier Reports

K1700528

Field Duplicate RPD Report

Lab Reporting Batch ID: K1700528 **Laboratory: ALS_K**

EDD Filename: K1700528_SEDD2A_rev **eQAPP Name: Arcadis_FtBliss_ALS_160627**

Method: 6020A
Matrix: Soil

Analyte	*Concentration (mg/Kg)*		*Sample RPD*	*eQAPP RPD*	*Flag*
	FTBL-SS-B066-0-6-011617 (Dry)	**FD-011617-1 (Dry)**			
LEAD	18.6	50.0	92	50.00	J (all detects)

Project Name and Number: 06261038.0001.00400 - Closed Castner Firing Range

LDC #: 38037B4a
SDG #: K1700528
Laboratory: ALS Environmental

VALIDATION COMPLETENESS WORKSHEET
ADR

Date: 2/8/17

[redacted]

METHOD: Lead (EPA SW 846 Method 6020A)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A /N	
II.	ICP/MS Tune	A	
III.	Instrument Calibration	A	
IV.	ICP Interference Check Sample (ICS) Analysis	A	
V.	Laboratory Blanks	A	ICB/CCB only
VI.	Field Blanks	N	
VII.	Matrix Spike/Matrix Spike Duplicates	A	MS/D (from K1700524)
VIII.	Duplicate sample analysis	N	
IX.	Serial Dilution	A	
X.	Laboratory control samples	N	LCS
XI.	Field Duplicates	SW	Split = 1, FTBL-SS-B066-0-6-011617-QA (from FA4044O
XII.	Internal Standard (ICP-MS)	A	
XIII.	Sample Result Verification	N	
XIV	Overall Assessment of Data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID	Lab ID	Matrix	Date
1	FTBL-SS-B066-0-6-011617	K1700528-001	Soil	01/16/17
2	FTBL-SS-B065-0-6-011617	K1700528-002	Soil	01/16/17
3	FTBL-SS-B064-0-6-011617	K1700528-003	Soil	01/16/17
4	FTBL-SS-B061-0-6-011617	K1700528-004	Soil	01/16/17
5	FTBL-SS-B062-0-6-011617	K1700528-005	Soil	01/16/17
6	FTBL-SS-B063-0-6-011617	K1700528-006	Soil	01/16/17
7	FTBL-SS-B072-0-6-011617	K1700528-007	Soil	01/16/17
8	FTBL-SS-B071-0-6-011617	K1700528-008	Soil	01/16/17
9	FD-011617-1	K1700528-009	Soil	01/16/17
10				
11				
12				

Notes:

LDC#: 38037B4b

VALIDATION FINDINGS WORKSHEET

Field Duplicates

METHOD: Metals (EPA Method 6010B/7000)

Analyte	Concentration (mg/Kg)		RPD (≤50)	
	1	FTBL-SS-B066-0-6-011617-QA		
Lead	18.6	48.8	90	Jdet/A

\\LDCFILESERVER\Validation\FIELD DUPLICATES\FD_inorganic\38037B4b.wpd

Quality Control Outlier Reports

K1700530

(No Outliers)

Quality Control
Outlier Reports

K1700531

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: K1700531 **Laboratory: ALS_K**

EDD Filename: K1700531_SEDD2A **eQAPP Name: Arcadis_FtBliss_ALS_160627**

Method: **6020A**
Matrix: **Soil**

QC Sample ID (Associated Samples)	*Compound*	*MS %R*	*MSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
FTBL-SED-073-0-6-011717MS (Dry) FTBL-SED-073-0-6-011717MSD (Dry) (FTBL-SED-073-0-6-011717)	ZINC	76	78	82.00-119.00	-	ZINC	No Qual Serial Dilution OK

Project Name and Number: 06261038.0001.00400 - Closed Castner Firing Range

Field Duplicate RPD Report

Lab Reporting Batch ID: K1700531 **Laboratory: ALS_K**

EDD Filename: K1700531_SEDD2A_rev **eQAPP Name: Arcadis_FtBliss_ALS_160627**

Method: 6020A
Matrix: Soil

Analyte	*Concentration (mg/Kg)*		*Sample RPD*	*eQAPP RPD*	*Flag*
	FTBL-SED-072-0-6-011717	FD-011717-1 (Dry)			
ZINC	77.7	80.6	4	50.00	No Qualifiers Applied

Project Name and Number: 06261038.0001.00400 - Closed Castner Firing Range

LDC #: 38037D4a
SDG #: K1700531
Laboratory: ALS Environmental

VALIDATION COMPLETENESS WORKSHEET
ADR

[redacted]

METHOD: ~~Lead~~ Zinc (EPA SW 846 Method 6020A)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A /N	
II.	ICP/MS Tune	A	
III.	Instrument Calibration	A	
IV.	ICP Interference Check Sample (ICS) Analysis	A	
V.	Laboratory Blanks	A	ICB/CCB only
VI.	Field Blanks	N	
VII.	Matrix Spike/Matrix Spike Duplicates	N	MS/D: Zn %R out, SD %D in, no quals
VIII.	Duplicate sample analysis	N	
IX.	Serial Dilution	A	
X.	Laboratory control samples	N	LCS
XI.	Field Duplicates	N	
XII.	Internal Standard (ICP-MS)	A	
XIII.	Sample Result Verification	N	
XIV.	Overall Assessment of Data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID	Lab ID	Matrix	Date
1	FTBL-SED-073-0-6-011717	K1700531-001	Soil	01/17/17
2	FTBL-SED-072-0-6-011717	K1700531-002	Soil	01/17/17
3	FTBL-SED-070-0-6-011717	K1700531-003	Soil	01/17/17
4	FTBL-SED-071-0-6-011717	K1700531-004	Soil	01/17/17
5	FTBL-SED-069-0-6-011717	K1700531-005	Soil	01/17/17
6	FD-011717-1	K1700531-006	Soil	01/17/17
7	FTBL-SED-073-0-6-011717MS	K1700531-001MS	Soil	01/17/17
8	FTBL-SED-073-0-6-011717MSD	K1700531-001MSD	Soil	01/17/17
9				
10				
11				
12				

Notes:

Enclosure II

Level IV Data Validation Reports

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Fort Bliss, Castner Range

LDC Report Date: February 8, 2017

Parameters: Lead

Validation Level: Level IV

Laboratory: ALS Environmental

Sample Delivery Group (SDG): K1700530

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
FTBL-SS-B073-0-6-011717	K1700530-001	Soil	01/17/17
FTBL-SS-B075-0-6-011717	K1700530-002	Soil	01/17/17
FTBL-SS-B074-0-6-011717	K1700530-003	Soil	01/17/17

Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Final Quality Assurance Project Plan, Military Munitions Response Program Remedial Investigation, Closed Castner Firing Range, Fort Bliss, El Paso, Texas (February 2015), the U.S. Department of Defense (DoD) Quality Systems Manual (QSM) for Environmental Laboratories, Version 5.0 (July 2013), and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines (CLPNFG) for Inorganic Superfund Data Review (October 2004). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Lead by Environmental Protection Agency (EPA) SW 846 Method 6020A

All sample results were subjected to Level IV evaluation, which is comprised of the quality control (QC) summary forms as well as the raw data, to confirm sample quantitation and identification.

The following are definitions of the data qualifiers utilized during data validation:

J (Estimated): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated due to non-conformances discovered during data validation.

U (Non-detected): The compound or analyte was analyzed for and positively identified by the laboratory; however the compound or analyte should be considered non-detected at the reported concentration due to the presence of contaminants detected in the associated blank(s).

UJ (Non-detected estimated): The compound or analyte was reported as not detected by the laboratory; however the reported quantitation/detection limit is estimated due to non-conformances discovered during data validation.

R (Rejected): The sample results were rejected due to gross non-conformances discovered during data validation. Data qualified as rejected is not usable.

NA (Not Applicable): The non-conformance discovered during data validation demonstrates a high bias, while the affected compound or analyte in the associated sample(s) was reported as not detected by the laboratory and did not warrant the qualification of the data.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

I. Sample Receipt and Technical Holding Times

All samples were received in good condition.

All technical holding time requirements were met.

II. ICPMS Tune

The mass calibration was within 0.1 AMU and the percent relative standard deviation (%RSD) was less than or equal to 5%.

III. Instrument Calibration

Initial and continuing calibrations were performed as required by the method.

The initial calibration verification (ICV) and continuing calibration verification (CCV) standards were within QC limits.

IV. ICP Interference Check Sample Analysis

The frequency of interference check sample (ICS) analysis was met. All criteria were within QC limits.

V. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks.

VI. Field Blanks

No field blanks were identified in this SDG.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on an associated project sample. Percent recoveries (%R) were within QC limits. Relative percent differences (RPD) were within QC limits.

VIII. Duplicate Sample Analysis

The laboratory has indicated that there were no duplicate (DUP) analyses specified for the samples in this SDG, and therefore duplicate analyses were not performed for this SDG.

IX. Serial Dilution

Serial dilution analysis was performed on an associated project sample. Percent differences (%D) were within QC limits.

X. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

XI. Field Duplicates

No field duplicates were identified in this SDG.

XII. Internal Standards (ICP-MS)

All internal standard percent recoveries (%R) were within QC limits.

XIII. Sample Result Verification

All sample result verifications were acceptable.

XIV. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

The quality control criteria reviewed were met and are considered acceptable. Based upon the data validation all results are considered valid and usable for all purposes.

Fort Bliss, Castner Range
Lead - Data Qualification Summary - SDG K1700530

No Sample Data Qualified in this SDG

Fort Bliss, Castner Range
Lead - Laboratory Blank Data Qualification Summary - SDG K1700530

No Sample Data Qualified in this SDG

Fort Bliss, Castner Range
Lead - Field Blank Data Qualification Summary - SDG K1700530

No Sample Data Qualified in this SDG

LDC #: 38037C4a
SDG #: K1700530
Laboratory: ALS Environmental

VALIDATION COMPLETENESS WORKSHEET
Level IV

Date: 2/8/17
Page: 1 of 1

METHOD: Lead (EPA SW 846 Method 6020A)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A / A	
II.	ICP/MS Tune	A	
III.	Instrument Calibration	A	
IV.	ICP Interference Check Sample (ICS) Analysis	A	
V.	Laboratory Blanks	A	~~ICB/CCB only~~ c
VI.	Field Blanks	N	
VII.	Matrix Spike/Matrix Spike Duplicates	A	MS/D (from K1700524)
VIII.	Duplicate sample analysis	N	
IX.	Serial Dilution	A	
X.	Laboratory control samples	A	LCS
XI.	Field Duplicates	N	
XII.	Internal Standard (ICP-MS)	A	
XIII.	Sample Result Verification	A	
XIV.	Overall Assessment of Data	A	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID	Lab ID	Matrix	Date
1	FTBL-SS-B073-0-6-011717	K1700530-001	Soil	01/17/17
2	FTBL-SS-B075-0-6-011717	K1700530-002	Soil	01/17/17
3	FTBL-SS-B074-0-6-011717	K1700530-003	Soil	01/17/17
4				
5				
6				
7				
8				
9				
10				
11				
12				

Notes:

)C #: 380371C4a

VALIDATION FINDINGS CHECKLIST

[redacted]

Method: Metals (EPA SW 846 Method 6010/6020/7000)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. ICP/MS Tune				
Were all isotopes in the tuning solution mass resolution within 0.1 amu?	✓			
Were %RSD of isotopes in the tuning solution ≤5%?	✓			
III. Calibration				
Were all instruments calibrated daily, each set-up time?	✓			
Were the proper number of standards used?	✓			
Were all initial and continuing calibration verification %Rs within the 90-110% (80-120% for mercury) QC limits?	✓			
Were the low standard checks within 70-130%	✓			
Were all initial calibration correlation coefficients within limits as specified by the method?	✓			
IV. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
V. ICP Interference Check Sample				
Were ICP interference check samples performed daily?	✓			
Were the AB solution percent recoveries (%R) with the 80-120% QC limits?			✓	
VI. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and duplicate (DUP) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD or MS/DUP. Soil / Water.	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the 75-125 QC limits? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.	✓			
Were the MS/MSD or duplicate relative percent differences (RPD) ≤ 20% for waters and ≤ 35% for soil samples? A control limit of +/- RL(+/-2X RL for soil) was used for samples that were ≤ 5X the RL, including when only one of the duplicate sample values were ≤ 5X the RL.	✓			
VII. Laboratory control samples				
Was an LCS anaylzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the 80-120% QC limits for water samples and laboratory established QC limits for soils?	✓			

[redacted]

Validation Area	Yes	No	NA	Findings/Comments
VIII. Internal Standards (EPA SW 846 Method 6020/EPA 200.8)				
Were all the percent recoveries (%R) within the 30-120% (6020)/60-125% (200.8) of the intensity of the internal standard in the associated initial calibration?	✓			
If the %Rs were outside the criteria, was a reanalysis performed?			✓	
IX. ICP Serial Dilution				
Was an ICP serial dilution analyzed if analyte concentrations were > 50X the MDL (ICP)/>100X the MDL(ICP/MS)?	✓	✓		
Were all percent differences (%Ds) < 10%?	✓			
Was there evidence of negative interference? If yes, professional judgement will be used to qualify the data.			✓	
X. Sample Result Verification				
Were RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XI. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XII. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target analytes were detected in the field duplicates.			✓	
XIII. Field blanks				
Field blanks were identified in this SDG.		✓	✓	
Target analytes were detected in the field blanks.				

LDC #: 58037C4

VALIDATION FINDINGS WORKSHEET
Initial and Continuing Calibration Calculation Verification

[redacted]

METHOD: Trace metals (EPA SW 846 Method 6010/6020/7000)

An initial and continuing calibration verification percent recovery (%R) was recalculated for each type of analysis using the following formula:

%R = Found x 100 / True

Where, Found = concentration (in ug/L) of each analyte measured in the analysis of the ICV or CCV solution
True = concentration (in ug/L) of each analyte in the ICV or CCV source

Standard ID	Type of Analysis	Element	Found (ug/L)	True (ug/L)	Recalculated %R	Reported %R	Acceptable (Y/N)
	ICP (Initial calibration)						
ICV(11:28)	ICP/MS (Initial calibration)	Pb	25.348	25.0	~~101~~	~~101~~	Y
	CVAA (Initial calibration)						
	ICP (Continuing calibration)						
CCV(12:35)	ICP/MS (Continuing calibration)	Pb	24.809	25.0	99	99	Y
	CVAA (Continuing calibration)						

Comments:

CALCLC.4C4

LDC #: 38037C4

VALIDATION FINDINGS WORKSHEET
Level IV Recalculation Worksheet

[redacted]

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Percent recoveries (%R) for an ICP interference check sample, a laboratory control sample and a matrix spike sample were recalculated using the following formula:

$$\%R = \frac{Found}{True} \times 100$$

Where, Found = Concentration of each analyte measured in the analysis of the sample. For the matrix spike calculation, Found = SSR (spiked sample result) - SR (sample result).
True = Concentration of each analyte in the source.

A sample and duplicate relative percent difference (RPD) was recalculated using the following formula:

$$RPD = \frac{|S-D|}{(S+D)/2} \times 100$$

Where, S = Original sample concentration
D = Duplicate sample concentration

An ICP serial dilution percent difference (%D) was recalculated using the following formula:

$$\%D = \frac{|I-SDR|}{I} \times 100$$

Where, I = Initial Sample Result (mg/L)
SDR = Serial Dilution Result (mg/L) (Instrument Reading x 5)

Sample ID	Type of Analysis	Element	Found / S / I (units)	True / D / SDR (units)	Recalculated %R / RPD / %D	Reported %R / RPD / %D	Acceptable (Y/N)
N	ICP interference check						
LCS	Laboratory control sample		101.012	100	101	101	Y
N	Matrix spike		(SSR-SR)				
N	Duplicate						
N	ICP serial dilution						

Comments: _____

LDC #: 38032C4a

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

[redacted]

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Have results been reported and calculated correctly?
Y N N/A Are results within the calibrated range of the instruments and within the linear range of the ICP?
Y N N/A Are all detection limits below the CRDL?

Detected analyte results for Pb were recalculated and verified using the following equation:

Concentration = $\frac{(RD)(FV)(Dil)}{(In.\ Vol.)}$

RD = Raw data concentration
FV = Final volume (ml)
In. Vol. = Initial volume (ml) or weight (G)
Dil = Dilution factor

Recalculation:

$$1 = \frac{10mL(5)(210.184ug/L)}{0.88(1.383g)(1000)} = 86.35mg/kg$$

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
	1	Pb	86.4	86.4	Y
	2	↓	2430	2430	↓
	3		253	253	

Note:

ALS Environmental
ALS Group USA, Corp
1317 South 13th Avenue
Kelso, WA 98626
T : +1 360 577 7222
F : +1 360 636 1068
www.alsglobal.com

February 22, 2017

Analytical Report for Service Request No: K1700745

401 East Main Street
Suite 400
El Paso, TX 79901

RE: Closed Castner Firing Range / 06261038.0001.00400

Enclosed are the results of the sample(s) submitted to our laboratory January 25, 2017
For your reference, these analyses have been assigned our service request number **K1700745.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is _____ You may also contact me via

Respectfully submitted,

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Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEC UST	http://dec.alaska.gov/applications/eh/ehllabreports/USTLabs.aspx	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L14-51
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	Not available	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/portal/DIVISIONS/PublicParticipationandPermitSupport/LouisianaLaboratoryAccreditationProgram.aspx	03016
Maine DHS	Not available	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Montana DPHHS	http://www.dphhs.mt.gov/publichealth/	CERT0047
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/oqa/	WA005
North Carolina DWQ	http://www.dwqlab.org/	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/envserv/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	http://www.epa.gov/region8/water/dwhome/wyomingdi.html	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Case Narrative

ALS Environmental—Kelso Laboratory
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Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

ALS ENVIRONMENTAL

Client:	ARCADIS U.S., Inc.	**Service Request No.:**	K1700745
Project:	Closed Castner Firing Range/ 06261038.0001.00400	**Date Received:**	01/25/17
Sample Matrix:	Soil		

Case Narrative

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier IV validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Seventeen soil samples were received for analysis at ALS Environmental on 01/25/17. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4ºC upon receipt at the laboratory.

Total Metals

No anomalies associated with the analysis of these samples were observed.

TRRP

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Appendix A ALS Kelso-Laboratory Data Package Signature Page

This data package consists of:

☒ This signature page, the laboratory review checklist, and the following reportable data:

☒ R1 Field chain-of-custody documentation;

☒ R2 Sample identification cross-reference;

☒ R3 Test reports (analytical data sheets) for each environmental sample that includes:

a) Items consistent with NELAC 5.13 or ISO/IEC 17025 Section 5.10
b) dilution factors,
c) preparation methods,
d) cleanup methods, and
e) if required for the project, tentatively identified compounds (TICs).

☒ R4 Surrogate recovery data including:

a) Calculated recovery (%R), and
b) The laboratory's surrogate QC limits.

☒ R5 Test reports/summary forms for blank samples;

☒ R6 Test reports/summary forms for laboratory control samples (LCSs) including:

a) LCS spiking amounts,
b) Calculated %R for each analyte, and
c) The laboratory's LCS QC limits.

☒ R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

a) Samples associated with the MS/MSD clearly identified,
b) MS/MSD spiking amounts,
c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
d) Calculated %Rs and relative percent differences (RPDs), and
e) The laboratory's MS/MSD QC limits

☒ R8 Laboratory analytical duplicate (if applicable) recovery and precision:

a) the amount of analyte measured in the duplicate,
b) the calculated RPD, and
c) the laboratory's QC limits for analytical duplicates.

☒ R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix;

☒ R10 Other problems or anomalies.

☒ The Exception Report for every "No" or "Not Reviewed (NR)" item in laboratory review checklist.

Release Statement: I am responsible for the release of this laboratory data package. This data package has been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. By me signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

Check, if applicable: [ ] –This laboratory is an in-house laboratory controlled by the person responding to rule. The official signing the cover page of the rule-required report (for example, the APAR) in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Laboratory Review Checklist: Reportable Data							
Laboratory Name: ALS Laboratory Group			LRC Date: 2/23/2017				
Project Name: Closed Castner Firing Range			Laboratory Job Number: K1700745				
Reviewer Name:			Prep Batch Number(s): Various				
#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	I	**Chain-of-custody (C-O-C)**					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?	X				
R2	I	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	I	**Test reports**					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW-846 Method 5035?			X		
		If required for the project, TICs reported?			X		
R4	I	**Surrogate recovery data**					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	I	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	I	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	I	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	X				
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	I	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	I	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	I	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Were all necessary corrective actions performed for the reported data?	X				
		Was applicable and available technology used to lower the SDL and minimize the matrix interference affects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Program for the analytes, matrices and methods associated with this laboratory data package?	X				

Laboratory Review Checklist: Reportable Data							
Laboratory Name: ALS Laboratory Group			LRC Date: 2/23/2017				
Project Name: Closed Castner Firing Range			Laboratory Job Number: K1700745				
Reviewer Name:			Prep Batch Number(s): Various				
#[1]	**A[2]**	**Description**	**Yes**	**No**	**NA[3]**	**NR[4]**	**ER#[5]**
S1	I	**Initial calibration (ICAL)**					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	I	**Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB)**					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	**Mass spectral tuning:**					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S4	O	**Internal standards (IS):**					
		Were IS area counts and retention times within the method-required QC limits?			X		
S5	I	**Raw data** (NELAC section 1 appendix A glossary, and section 5.12 or ISO/IEC 17025 section					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	**Dual column confirmation**					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	**Tentatively identified compounds (TICs):**					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	**Interference Check Sample (ICS) results:**					
		Were percent recoveries within method QC limits?	X				
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X				
S10	I	**Method detection limit (MDL) studies**					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	I	**Proficiency test reports:**					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	I	**Standards documentation**					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	I	**Compound/analyte identification procedures**					
		Are the procedures for compound/analyte identification documented?	X				
S14	I	**Demonstration of analyst competency (DOC)**					
		Was DOC conducted consistent with NELAC Chapter 5C or ISO/IEC 4?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	I	**Verification/validation documentation for methods** (NELAC Chap 5 or ISO/IEC 17025 Section 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	I	**Laboratory standard operating procedures (SOPs):**					
		Are laboratory SOPs current and on file for each method performed?	X				

Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
O = Organic Analyses; I = Inorganic Analyses (and general chemistry, when applicable);
NA = Not Applicable;
NR = Not Reviewed;
R# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Reportable Data	
Laboratory Name: ALS Laboratory Group	LRC Date: 2/23/2017
Project Name: Closed Castner Firing Range	Laboratory Job Number: K1700745
Reviewer Name:	Prep Batch Number(s): Various

ER#[5]	Description

Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
O = Organic Analyses; I = Inorganic Analyses (and general chemistry, when applicable);
NA = Not Applicable;
NR = Not Reviewed;
R# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Chain of Custody

ALS Environmental—Kelso Laboratory
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Phone (360)577-7222 Fax (360)636-1068
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Chain of Custody

ADDRESS 1317 South 13th Ave., Kelso, WA 98626
PHONE 1 360 577 7222 FAX 1 360 636 1068
Columbia Analytical Services, Inc.
Part of the ALS Group A Campbell Brothers Limited Company

Work Order No.: K1700745

Project Manager	[redacted]	**Bill to:**	PO Number: 06261038.0001.00400
Client Name:	Arcadis	**Company:**	Arcadis
Address:	401 East Main Street, Suite 400	**Address:**	630 Plaza Drive
City, State ZIP:	El Paso, Texas 79901	**City, State ZIP:**	Highlands Ranch, Co 80129
Email:	[redacted] **Phone:** 915-433-1761	**Email:**	accountspayable.administration@arcadis.com
Project Name:	Closed Castner Firing Range		
Project Number:	06261038.0001.00400		

[redacted]

SAMPLE RECEIPT

Temperature (°C):		Temp Blank Present		
Received Intact:	Yes	No	N/A	Wet Ice / Blue Ice
Cooler Custody Seals:	Yes	No	N/A	Total Containers:
Sample Custody Seals:	Yes	No	N/A	

REQUESTED ANALYSIS

TAT
Standard
Same Day ***
Next Day ***
5 Day
EDD

*** Please call fo availability

Due Date:

Sample Identification	Matrix	Date Sampled	Time Sampled	Lab ID	No. of Containers	Zinc	Arsenic TC	Arsenic	Comments
FTBL-SED- 060-0-6-011817	S	1/18/17	910	1	1	X	X	X	
FTBL-SED- 061-0-6-011817	S	1/18/17	915	2	1	X	X	X	
FTBL-SED- 057-0-6-011817	S	1/18/17	1000	3	1	X	X		
FTBL-SED- 056-0-6-011817	S	1/18/17	1005	4	1	X	X		
FTBL-SED- 055-0-6-011817	S	1/18/17	1012	5	1	X			
FTBL-SED- 054-0-6-011817	S	1/18/17	1035	6	1	X			
FTBL-SED- 053-0-6-011817	S	1/18/17	1055	7	1	X			
FTBL-SED- 066-0-6-011817	S	1/18/17	1235	8	1	X			
FTBL-SED- 065-0-6-011817	S	1/18/17	1300	9	1	X			
FTBL-SED- 063-0-6-011817	S	1/18/17	1507	10	1	X		X	
FTBL-SED- 064-0-6-011817	S	1/18/17	1520	11	1	X		X	

Dissolved	Ag, Al, As, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, K, Li, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Se, Si, Sn, Sr, Tl, V, Zn, Zr
Total	Ag, Al, As, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, K, Li, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Se, Si, Sn, Sr, Tl, V, Zn, Zr

Additional Methods Available Upon Request

RELINQUISHED BY	Date/Time	RECEIVED BY	Time
[redacted]	1/20/17 1745	[redacted]	0934

Chain of Custody

K1700745

ADDRESS 1317 South 13th Ave., Kelso, WA 98626
PHONE 1 360 577 7222 FAX 1 360 636 1068
Columbia Analytical Services, Inc.
[redacted]roup A Campbell Brothers Limited Company

Work Order No.:

Project Manager	[redacted]	**Bill to:**	PO Number: 06261038.0001.00400
Client Name:	Arcadis	**Company:**	Arcadis
Address:	401 East Main Street, Suite 400	**Address:**	630 Plaza Drive
City, State ZIP:	El Paso, Texas 79901	**City, State ZIP:**	Highlands Ranch, Co 80129
Email:	[redacted] **Phone:** 915-433-1761	**Email:**	accountspayable.administration@arcadis.com
Project Name:	Closed Castner Firing Range		
Project Number:	06261038.0001.00400		
P.O. Number:	[redacted]		
Sampler's Name:	[redacted]		

SAMPLE RECEIPT

Temperature (°C):		Temp Blank Present		
Received Intact:	Yes	No	N/A	Wet Ice / Blue Ice
Cooler Custody Seals:	Yes	No	N/A	Total Containers:
Sample Custody Seals:	Yes	No	N/A	

REQUESTED ANALYSIS

TAT

Standard
Same Day ***
Next Day ***
5 Day
EDD

*** Please call fo availability

Due Date:

Sample Identification	Matrix	Date Sampled	Time Sampled	Lab ID	No. of Containers	Zinc	Arsenic
~~FTBL-SED-~~ FD-011817-1	S	1/18/17		12	1	X	X
FTBL-SED-	[redacted]				1		
FTBL-SED-					1		
FTBL-SED-					1		
FTBL-SED-					1		
FTBL-SED-					1		
FTBL-SED-					1		
FTBL-SED-					1		
FTBL-SED-					1		
FTBL-SED-					1		
FTBL-SED-					1		

Comments

Dissolved	Ag, Al, As, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, K, Li, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Se, Si, Sn, Sr, Tl, V, Zn, Zr
Total	Ag, Al, As, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, K, Li, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Se, Si, Sn, Sr, Tl, V, Zn, Zr

Additional Methods Available Upon Request

RELINQUISHED BY			RECEIVED BY		
Print Name	Signature	Date/Time	Print Name	Signature	Date/Time
[redacted]	[redacted]	1/24/17 1700 1/24/17 1745	[redacted]		1/25/17 0930

Chain of Custody

K1700745

ADDRESS 1317 South 13th Ave., Kelso, WA 98626
PHONE 1 360 577 7222 FAX 1 360 636 1068
Columbia Analytical Services, Inc.
[redacted] Group A Campbell Brothers Limited Company

Work Order No.:

Project Manag [redacted]		**Bill to:**	PO Number: 06261038.0001.00400
Client Name:	Arcadis	**Company:**	Arcadis
Address:	401 East Main Street, Suite 400	**Address:**	630 Plaza Drive
City, State ZIP:	El Paso, Texas 79901	**City, State ZIP:**	Highlands Ranch, Co 80129
[redacted] **Phone:**	915-433-1761	**Email:**	accountspayable.administration@arcadis.com
Project Name:	Closed Castner Firing Range		
Project Number:	06261038.0001.00400		
[redacted]			

SAMPLE RECEIPT

Temperature (°C):		Temp Blank Present		
Received Intact:	Yes	No	N/A	Wet Ice / Blue Ice
Cooler Custody Seals:	Yes	No	N/A	Total Containers:
Sample Custody Seals:	Yes	No	N/A	

REQUESTED ANALYSIS

TAT

Standard
Same Day ***
Next Day ***
5 Day
EDD

*** Please call fo availability

Due Date:

Sample Identification	Matrix	Date Sampled	Time Sampled	Lab ID	No. of Containers	Zinc	Arsenic
FTBL-SED- 068-0-6-012417	S	1/24/17	1340	13	1	X	
FTBL-SED- 067-0-6-012417	S	1/24/17	1400	14	1	X	
FTBL-SED- 058-0-6-012417	S	1/24/17	1425	15	1	X	
FTBL-SED- 059-0-6-012417	S	1/24/17	1440	16	1	X	
FTBL-SED- 062-0-6-012417	S	1/24/17	1505	17	1	X	X
FTBL-SED-	S				1		
FTBL-SED-							
FTBL-SED-							
FTBL-SED-							
FTBL-SED-							
FTBL-SED-							

[redacted]

Dissolved	Ag, Al, As, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, K, Li, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Se, Si, Sn, Sr, Tl, V, Zn, Zr
Total	Ag, Al, As, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, K, Li, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Se, Si, Sn, Sr, Tl, V, Zn, Zr

Additional Methods Available Upon Request

Comments

RELINQUISHED BY			RECEIVED BY		
Print Name	Signature	Date/Time	Print Name	Signature	Date/Time
[redacted]					1/25/17 0930

[redacted]

Cooler Receipt and Preservation Form

Client ARCADIS Service Request *K17* 00745

Received: 1/25/17 Opened: 1/25/17 By: KD Unloaded: 1/25/17 By: KD

1. Samples were received via? *USPS* (*Fed Ex*) *UPS* *DHL* *PDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) (*Cooler*) *Box* *Envelope* *Other* _____ *NA*
3. Were custody seals on coolers? NA (Y) N If yes, how many and where? 1 front
   If present, were custody seals intact? (Y) N If present, were they signed and dated? (Y) N

Raw Cooler Temp	Corrected Cooler Temp	Raw Temp Blank	Corrected Temp Blank	Corr. Factor	Thermometer ID	Cooler/COC ID (NA)	Tracking Number (NA)	Filed
-.9	-.9	-.3	-.3	0	308		7854 0065 3227	
-.2	-.2	1.0	1.0	0	381		7854 0065 3216	

4. Packing material: *Inserts* (*Baggies*) (*Bubble Wrap*) *Gel Packs* (*Wet Ice*) *Dry Ice* *Sleeves* _____
5. Were custody papers properly filled out (ink, signed, etc.)? NA (Y) N
6. Were samples received in good condition (temperature, unbroken)? *Indicate in the table below.* NA (Y) N
   If applicable, tissue samples were received: ***Frozen*** ***Partially Thawed*** ***Thawed***
7. Were all sample labels complete (i.e analysis, preservation, etc.)? NA (Y) N
8. Did all sample labels and tags agree with custody papers? *Indicate major discrepancies in the table on page 2.* NA (Y) N
9. Were appropriate bottles/containers and volumes received for the tests indicated? NA (Y) N
10. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* (NA) Y N
11. Were VOA vials received without headspace? *Indicate in the table below.* (NA) Y N
12. Was C12/Res negative? (NA) Y N

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Out of Temp	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, & Resolutions: _____

Total Solids

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Analytical Report

Client:	ARCADIS U.S., Inc.	**Service Request:**	K1700745
Project:	Closed Castner Firing Range/06261038.0001.00400	**Date Collected:**	01/18/17 - 01/24/17
Sample Matrix:	Soil	**Date Received:**	01/25/17
Analysis Method:	160.3 Modified	**Units:**	Percent
Prep Method:	None	**Basis:**	Air Dried

Solids, Total

Sample Name	Lab Code	Result	MRL	MDL	Dil.	Date Analyzed	Q
FTBL-SED-060-0-6-011817	K1700745-001	**86.0**	-	-	1	01/25/17 17:02	
FTBL-SED-061-0-6-011817	K1700745-002	**80.9**	-	-	1	01/25/17 17:02	
FTBL-SED-057-0-6-011817	K1700745-003	**84.4**	-	-	1	01/25/17 17:02	
FTBL-SED-056-0-6-011817	K1700745-004	**92.1**	-	-	1	01/25/17 17:02	
FTBL-SED-055-0-6-011817	K1700745-005	**91.0**	-	-	1	01/25/17 17:02	
FTBL-SED-054-0-6-011817	K1700745-006	**84.9**	-	-	1	01/25/17 17:02	
FTBL-SED-053-0-6-011817	K1700745-007	**84.3**	-	-	1	01/25/17 17:02	
FTBL-SED-066-0-6-011817	K1700745-008	**86.9**	-	-	1	01/25/17 17:02	
FTBL-SED-065-0-6-011817	K1700745-009	**91.4**	-	-	1	01/25/17 17:02	
FTBL-SED-063-0-6-011817	K1700745-010	**89.6**	-	-	1	01/25/17 17:02	
FTBL-SED-064-0-6-011817	K1700745-011	**84.9**	-	-	1	01/25/17 17:02	
FD-011817-1	K1700745-012	**88.3**	-	-	1	01/25/17 17:02	
FTBL-SED-068-0-6-012417	K1700745-013	**96.8**	-	-	1	01/25/17 17:02	
FTBL-SED-067-0-6-012417	K1700745-014	**92.4**	-	-	1	01/25/17 17:02	
FTBL-SED-058-0-6-012417	K1700745-015	**89.7**	-	-	1	01/25/17 17:02	
FTBL-SED-059-0-6-012417	K1700745-016	**95.1**	-	-	1	01/25/17 17:02	
FTBL-SED-062-0-6-012417	K1700745-017	**87.0**	-	-	1	01/25/17 17:02	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	ARCADIS U.S., Inc.	**Service Request:**	K1700745
Project	Closed Castner Firing Range/06261038.0001.00400	**Date Collected:**	NA
Sample Matrix:	Paperboard	**Date Received:**	NA
Analysis Method:	160.3 Modified	**Units:**	Percent
Prep Method:	None	**Basis:**	NA

Replicate Sample Summary
Inorganic Parameters

Sample Name:	Lab Code:	MRL	Sample Result	Duplicate Result	Average	RPD	RPD Limit	Date Analyzed
Batch QC	K1700291-007DUP	-	97.3	97.2	97.3	<1	20	01/25/17

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	ARCADIS U.S., Inc.	**Service Request:**	K1700745
Project	Closed Castner Firing Range/06261038.0001.00400	**Date Collected:**	NA
Sample Matrix:	Misc. Solid	**Date Received:**	NA
Analysis Method:	160.3 Modified	**Units:**	Percent
Prep Method:	None	**Basis:**	As Received

Replicate Sample Summary
Inorganic Parameters

Sample Name:	Lab Code:	MRL	Sample Result	Duplicate Result	Average	RPD	RPD Limit	Date Analyzed
Batch QC	K1700504-001DUP	-	99.5	99.5	99.5	<1	20	01/25/17

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	ARCADIS U.S., Inc.	**Service Request:**	K1700745
Project	Closed Castner Firing Range/06261038.0001.00400	**Date Collected:**	01/18/17
Sample Matrix:	Soil	**Date Received:**	01/25/17
Analysis Method:	160.3 Modified	**Units:**	Percent
Prep Method:	None	**Basis:**	Air Dried

Replicate Sample Summary
Inorganic Parameters

Sample Name:	Lab Code:	MRL	Sample Result	Duplicate Result	Average	RPD	RPD Limit	Date Analyzed
FTBL-SED-053-0-6-011817	K1700745-007DUP	-	84.3	84.7	84.5	<1	20	01/25/17

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Analytical Report

Client:	ARCADIS U.S., Inc.	**Service Request:**	K1700745
Project:	Closed Castner Firing Range/06261038.0001.00400	**Date Collected:**	01/18/17 09:10
Sample Matrix:	Soil	**Date Received:**	01/25/17 09:30
Sample Name:	FTBL-SED-060-0-6-011817	**Basis:**	Dry
Lab Code:	K1700745-001		

Total Metals

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	6020A	**5.79**	mg/Kg	0.56	0.14	0.04	5	01/31/17 09:48	01/25/17	
Zinc	6020A	**83.5**	mg/Kg	0.56	0.56	0.22	5	01/31/17 09:48	01/25/17	

Analytical Report

Client:	ARCADIS U.S., Inc.	**Service Request:**	K1700745
Project:	Closed Castner Firing Range/06261038.0001.00400	**Date Collected:**	01/18/17 09:15
Sample Matrix:	Soil	**Date Received:**	01/25/17 09:30
Sample Name:	FTBL-SED-061-0-6-011817	**Basis:**	Dry
Lab Code:	K1700745-002		

Total Metals

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	6020A	**11.0**	mg/Kg	0.57	0.14	0.05	5	01/31/17 09:59	01/25/17	
Zinc	6020A	**118**	mg/Kg	0.57	0.57	0.23	5	01/31/17 09:59	01/25/17	

Analytical Report

Client:	ARCADIS U.S., Inc.	**Service Request:**	K1700745
Project:	Closed Castner Firing Range/06261038.0001.00400	**Date Collected:**	01/18/17 10:00
Sample Matrix:	Soil	**Date Received:**	01/25/17 09:30
Sample Name:	FTBL-SED-057-0-6-011817	**Basis:**	Dry
Lab Code:	K1700745-003		

Total Metals

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Zinc	6020A	**48.2**	mg/Kg	0.57	0.57	0.23	5	01/31/17 10:02	01/25/17	

Analytical Report

Client:	ARCADIS U.S., Inc.	**Service Request:**	K1700745
Project:	Closed Castner Firing Range/06261038.0001.00400	**Date Collected:**	01/18/17 10:05
Sample Matrix:	Soil	**Date Received:**	01/25/17 09:30
Sample Name:	FTBL-SED-056-0-6-011817	**Basis:**	Dry
Lab Code:	K1700745-004		

Total Metals

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Zinc	6020A	**109**	mg/Kg	0.48	0.48	0.19	5	01/31/17 10:15	01/25/17	

Analytical Report

Client:	ARCADIS U.S., Inc.	**Service Request:**	K1700745
Project:	Closed Castner Firing Range/06261038.0001.00400	**Date Collected:**	01/18/17 10:12
Sample Matrix:	Soil	**Date Received:**	01/25/17 09:30
Sample Name:	FTBL-SED-055-0-6-011817	**Basis:**	Dry
Lab Code:	K1700745-005		

Total Metals

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Zinc	6020A	**65.9**	mg/Kg	0.51	0.51	0.20	5	01/31/17 10:17	01/25/17	

Analytical Report

Client:	ARCADIS U.S., Inc.	**Service Request:**	K1700745
Project:	Closed Castner Firing Range/06261038.0001.00400	**Date Collected:**	01/18/17 10:35
Sample Matrix:	Soil	**Date Received:**	01/25/17 09:30
Sample Name:	FTBL-SED-054-0-6-011817	**Basis:**	Dry
Lab Code:	K1700745-006		

Total Metals

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Zinc	6020A	**271**	mg/Kg	0.51	0.51	0.21	5	01/31/17 10:19	01/25/17	

Analytical Report

Client:	ARCADIS U.S., Inc.	**Service Request:**	K1700745
Project:	Closed Castner Firing Range/06261038.0001.00400	**Date Collected:**	01/18/17 10:55
Sample Matrix:	Soil	**Date Received:**	01/25/17 09:30
Sample Name:	FTBL-SED-053-0-6-011817	**Basis:**	Dry
Lab Code:	K1700745-007		

Total Metals

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Zinc	6020A	**186**	mg/Kg	0.57	0.57	0.23	5	01/31/17 10:21	01/25/17	

Analytical Report

Client:	ARCADIS U.S., Inc.	**Service Request:**	K1700745
Project:	Closed Castner Firing Range/06261038.0001.00400	**Date Collected:**	01/18/17 12:35
Sample Matrix:	Soil	**Date Received:**	01/25/17 09:30
Sample Name:	FTBL-SED-066-0-6-011817	**Basis:**	Dry
Lab Code:	K1700745-008		

Total Metals

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Zinc	6020A	**105**	mg/Kg	0.55	0.55	0.22	5	01/31/17 10:23	01/25/17	

Analytical Report

Client:	ARCADIS U.S., Inc.	**Service Request:**	K1700745
Project:	Closed Castner Firing Range/06261038.0001.00400	**Date Collected:**	01/18/17 13:00
Sample Matrix:	Soil	**Date Received:**	01/25/17 09:30
Sample Name:	FTBL-SED-065-0-6-011817	**Basis:**	Dry
Lab Code:	K1700745-009		

Total Metals

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Zinc	6020A	**118**	mg/Kg	0.51	0.51	0.21	5	01/31/17 10:26	01/25/17	

Analytical Report

Client:	ARCADIS U.S., Inc.	**Service Request:**	K1700745
Project:	Closed Castner Firing Range/06261038.0001.00400	**Date Collected:**	01/18/17 15:07
Sample Matrix:	Soil	**Date Received:**	01/25/17 09:30
Sample Name:	FTBL-SED-063-0-6-011817	**Basis:**	Dry
Lab Code:	K1700745-010		

Total Metals

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	6020A	**7.35**	mg/Kg	0.54	0.13	0.04	5	01/31/17 10:33	01/25/17	
Zinc	6020A	**107**	mg/Kg	0.54	0.54	0.21	5	01/31/17 10:33	01/25/17	

Analytical Report

Client:	ARCADIS U.S., Inc.	**Service Request:**	K1700745
Project:	Closed Castner Firing Range/06261038.0001.00400	**Date Collected:**	01/18/17 15:20
Sample Matrix:	Soil	**Date Received:**	01/25/17 09:30
Sample Name:	FTBL-SED-064-0-6-011817	**Basis:**	Dry
Lab Code:	K1700745-011		

Total Metals

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	6020A	**9.10**	mg/Kg	0.56	0.14	0.04	5	01/31/17 10:35	01/25/17	
Zinc	6020A	**166**	mg/Kg	0.56	0.56	0.22	5	01/31/17 10:35	01/25/17	

Analytical Report

Client:	ARCADIS U.S., Inc.	**Service Request:**	K1700745
Project:	Closed Castner Firing Range/06261038.0001.00400	**Date Collected:**	01/18/17
Sample Matrix:	Soil	**Date Received:**	01/25/17 09:30
Sample Name:	FD-011817-1	**Basis:**	Dry
Lab Code:	K1700745-012		

Total Metals

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	6020A	**7.03**	mg/Kg	0.54	0.13	0.04	5	01/31/17 10:37	01/25/17	
Zinc	6020A	**110**	mg/Kg	0.54	0.54	0.21	5	01/31/17 10:37	01/25/17	

Analytical Report

Client:	ARCADIS U.S., Inc.	**Service Request:**	K1700745
Project:	Closed Castner Firing Range/06261038.0001.00400	**Date Collected:**	01/24/17 13:40
Sample Matrix:	Soil	**Date Received:**	01/25/17 09:30
Sample Name:	FTBL-SED-068-0-6-012417	**Basis:**	Dry
Lab Code:	K1700745-013		

Total Metals

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Zinc	6020A	**58.4**	mg/Kg	0.50	0.50	0.20	5	01/31/17 10:39	01/25/17	

Analytical Report

Client:	ARCADIS U.S., Inc.	**Service Request:**	K1700745
Project:	Closed Castner Firing Range/06261038.0001.00400	**Date Collected:**	01/24/17 14:00
Sample Matrix:	Soil	**Date Received:**	01/25/17 09:30
Sample Name:	FTBL-SED-067-0-6-012417	**Basis:**	Dry
Lab Code:	K1700745-014		

Total Metals

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Zinc	6020A	**103**	mg/Kg	0.50	0.50	0.20	5	01/31/17 10:46	01/25/17	

Analytical Report

Client:	ARCADIS U.S., Inc.	**Service Request:**	K1700745
Project:	Closed Castner Firing Range/06261038.0001.00400	**Date Collected:**	01/24/17 14:25
Sample Matrix:	Soil	**Date Received:**	01/25/17 09:30
Sample Name:	FTBL-SED-058-0-6-012417	**Basis:**	Dry
Lab Code:	K1700745-015		

Total Metals

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Zinc	6020A	**96.9**	mg/Kg	0.54	0.54	0.22	5	01/31/17 10:48	01/25/17	

Analytical Report

Client:	ARCADIS U.S., Inc.	**Service Request:**	K1700745
Project:	Closed Castner Firing Range/06261038.0001.00400	**Date Collected:**	01/24/17 14:40
Sample Matrix:	Soil	**Date Received:**	01/25/17 09:30
Sample Name:	FTBL-SED-059-0-6-012417	**Basis:**	Dry
Lab Code:	K1700745-016		

Total Metals

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Zinc	6020A	**106**	mg/Kg	0.49	0.49	0.19	5	01/31/17 10:51	01/25/17	

Analytical Report

Client:	ARCADIS U.S., Inc.	**Service Request:**	K1700745
Project:	Closed Castner Firing Range/06261038.0001.00400	**Date Collected:**	01/24/17 15:05
Sample Matrix:	Soil	**Date Received:**	01/25/17 09:30
Sample Name:	FTBL-SED-062-0-6-012417	**Basis:**	Dry
Lab Code:	K1700745-017		

Total Metals

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	6020A	**8.94**	mg/Kg	0.54	0.14	0.04	5	01/31/17 10:53	01/25/17	
Zinc	6020A	**141**	mg/Kg	0.54	0.54	0.22	5	01/31/17 10:53	01/25/17	

Analytical Report

Client:	ARCADIS U.S., Inc.	**Service Request:**	K1700745
Project:	Closed Castner Firing Range/06261038.0001.00400	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	Dry
Lab Code:	KQ1700836-01		

Total Metals

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Arsenic	6020A	ND U	mg/Kg	0.5	0.13	0.04	5	01/31/17 09:43	01/25/17	
Zinc	6020A	ND U	mg/Kg	0.5	0.50	0.20	5	01/31/17 09:43	01/25/17	

Client:	ARCADIS U.S., Inc.	**Service Request:**	K1700745
Project:	Closed Castner Firing Range/06261038.0001.00400	**Date Collected:**	01/18/17
Sample Matrix:	Soil	**Date Received:**	01/25/17
		Date Analyzed:	01/31/17
		Date Extracted:	01/25/17

Duplicate Matrix Spike Summary
Total Metals

Sample Name:	FTBL-SED-060-0-6-011817	**Units:**	mg/Kg
Lab Code:	K1700745-001	**Basis:**	Dry
Analysis Method:	6020A		
Prep Method:	EPA 3050B		

		Matrix Spike			Duplicate Matrix Spike					
		KQ1700836-03			KQ1700836-04					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Arsenic	5.79	128	113	108	122	109	107	82-118	4	20
Zinc	83.5	189	113	93	173	109	82	82-119	9	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Printed 2/6/2017 2:07:15 PM Superset Reference:

Client: ARCADIS U.S., Inc.
Project: Closed Castner Firing Range/06261038.0001.00400
Sample Matrix: Soil

Service Request: K1700745
Date Analyzed: 01/31/17

Lab Control Sample Summary
Total Metals

Units:mg/Kg
Basis: Dry

Lab Control Sample
KQ1700836-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Arsenic	6020A	100	100	100	82-118
Zinc	6020A	91.5	100	91	82-119

Prep Summary Report

Client: ARCADIS U.S., Inc. **Service Request:**K1700745
Project: Closed Castner Firing Range/06261038.0001.00400
Sample Matrix: Soil

Metals

Prep Method: EPA 3050B **Extraction Lot:**280406
Analytical Method: 6020A

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Amount	Percent Solids
FTBL-SED-060-0-6-011817	K1700745-001	1/18/17	1/25/17	1.038 g	100 mL	
FTBL-SED-061-0-6-011817	K1700745-002	1/18/17	1/25/17	1.088 g	100 mL	
FTBL-SED-057-0-6-011817	K1700745-003	1/18/17	1/25/17	1.039 g	100 mL	
FTBL-SED-056-0-6-011817	K1700745-004	1/18/17	1/25/17	1.129 g	100 mL	
FTBL-SED-055-0-6-011817	K1700745-005	1/18/17	1/25/17	1.088 g	100 mL	
FTBL-SED-054-0-6-011817	K1700745-006	1/18/17	1/25/17	1.145 g	100 mL	
FTBL-SED-053-0-6-011817	K1700745-007	1/18/17	1/25/17	1.035 g	100 mL	
FTBL-SED-066-0-6-011817	K1700745-008	1/18/17	1/25/17	1.054 g	100 mL	
FTBL-SED-065-0-6-011817	K1700745-009	1/18/17	1/25/17	1.067 g	100 mL	
FTBL-SED-063-0-6-011817	K1700745-010	1/18/17	1/25/17	1.043 g	100 mL	
FTBL-SED-064-0-6-011817	K1700745-011	1/18/17	1/25/17	1.053 g	100 mL	
FD-011817-1	K1700745-012	1/18/17	1/25/17	1.054 g	100 mL	
FTBL-SED-068-0-6-012417	K1700745-013	1/24/17	1/25/17	1.030 g	100 mL	
FTBL-SED-067-0-6-012417	K1700745-014	1/24/17	1/25/17	1.092 g	100 mL	
FTBL-SED-058-0-6-012417	K1700745-015	1/24/17	1/25/17	1.032 g	100 mL	
FTBL-SED-059-0-6-012417	K1700745-016	1/24/17	1/25/17	1.079 g	100 mL	
FTBL-SED-062-0-6-012417	K1700745-017	1/24/17	1/25/17	1.059 g	100 mL	
Method Blank	KQ1700836-01MB	NA	NA	1.0000 g	100 mL	
Lab Control Sample	KQ1700836-02LCS	NA	NA	1.0000 g	100 mL	
Matrix Spike	KQ1700836-03MS	1/18/17	1/25/17	1.027 g	100 mL	
Duplicate Matrix Spike	KQ1700836-04DMS	1/18/17	1/25/17	1.063 g	100 mL	

Client: ARCADIS U.S., Inc. **Service Request:** K1700745

Project: Closed Castner Firing Range/06261038.0001.00400

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Concentration Units: ug/L

Analyte	Method	Analysis Batch	Initial Calibration			Continuing Calibration			Continuing Calibration		
			True	Found	%R (1)	True	Found	%R (1)	True	Found	%R (1)
Arsenic	6020A	532952	25.0	26.2	105	25.0	25.4	101	25.0	25.1	100
Zinc	6020A	532952	25.0	25.2	101	25.0	24.9	100	25.0	24.5	98

Client: ARCADIS U.S., Inc. **Service Request:** K1700745

Project: Closed Castner Firing Range/06261038.0001.00400

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Concentration Units: ug/L

Analyte	Method	Analysis Batch	Initial Calibration			Continuing Calibration			Continuing Calibration		
			True	Found	%R (1)	True	Found	%R (1)	True	Found	%R (1)
Arsenic	6020A	532952				25.0	25.2	101	25.0	25.4	102
Zinc	6020A	532952				25.0	24.3	97	25.0	24.4	97

Client: ARCADIS U.S., Inc. **Service Request:** K1700745

Project: Closed Castner Firing Range/06261038.0001.00400

INITIAL AND CONTINUING CALIBRATION BLANK

Concentration Units: ug/L

Analyte	Method	Analysis Batch	Initial Calibration Blank		Continuing Calibration Blank		Continuing Calibration Blank		Continuing Calibration Blank	
			Result	C	Result	C	Result	C	Result	C
Arsenic	6020A	532952	0.08	U	0.08	U	0.08	U	0.08	U
Zinc	6020A	532952	0.4	U	0.4	U	0.4	U	0.4	U

Client: ARCADIS U.S., Inc. **Service Request:** K1700745

Project: Closed Castner Firing Range/06261038.0001.00400

INITIAL AND CONTINUING CALIBRATION BLANK

Concentration Units: ug/L

Analyte	Method	Analysis Batch	Initial Calibration Blank Result	C	Continuing Calibration Blank Result	C	Continuing Calibration Blank Result	C	Continuing Calibration Blank Result	C
Arsenic	6020A	532952			0.08	U				
Zinc	6020A	532952			0.4	U				

Client: ARCADIS U.S., Inc. **Service Request:** K1700745

Project: Closed Castner Firing Range/06261038.0001.00400

LOW LEVEL INITIAL AND LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Concentration Units: ug/L

Sample ID / Analyte	Method	Analysis Batch:	Result	True Value	% Rec	% Rec. Limits	Analysis Date
LLICVS							
Arsenic	6020A	532952	1.2	1.0	116	80-120	01/31/17 09:30
Zinc	6020A	532952	0.8	1.0	83	80-120	01/31/17 09:30
LLCCVS							
Arsenic	6020A	532952	1.1	1.0	110	70-130	01/31/17 11:00
Zinc	6020A	532952	1.1	1.0	114	70-130	01/31/17 11:00

Client: ARCADIS U.S., Inc. **Service Request:** K1700745

Project: Closed Castner Firing Range/06261038.0001.00400

ICP INTERFERENCE CHECK SAMPLE

Sample ID ICSA **Concentration Units:** ug/L

Analyte	Method	Analysis Batch:	Result	True Value	% Rec	% Rec. Limits	Analysis Date
Arsenic	6020A	532952	0.2	-	-	-	01/31/17 09:34
Zinc	6020A	532952	0.5	-	-	-	01/31/17 09:34

Client: ARCADIS U.S., Inc. **Service Request:** K1700745

Project: Closed Castner Firing Range/06261038.0001.00400

ICP INTERFERENCE CHECK SAMPLE

Sample ID ICSAB **Concentration Units:** ug/L

Analyte	Method	Analysis Batch:	Result	True Value	% Rec	% Rec. Limits	Analysis Date
Arsenic	6020A	532952	25.3	25.0	101	80-120	01/31/17 09:36
Zinc	6020A	532952	20.3	25.0	81	80-120	01/31/17 09:36

Client: ARCADIS U.S., Inc. **Service Request:** K1700745

Project: Closed Castner Firing Range/06261038.0001.00400

POST SPIKE SAMPLE RECOVERY

Concentration Units: ug/L

Sample ID / Analyte	Method	Analysis Batch:	Initial Sample Result	Post Spike Result	True Value	% Rec	% Rec. Limits	Analysis Date
K1700745-001A								
Arsenic	6020A	532952	10.3	66.1	50.0	111	80-120	01/31/17 09:53

Results flagged with a pound (#) indicate the control criteria is not applicable.

Client: ARCADIS U.S., Inc. **Service Request:** K1700745

Project: Closed Castner Firing Range/06261038.0001.00400

ICP SERIAL DILUTIONS

Concentration Units: ug/L

Sample ID / Analyte	Method	Analysis Batch:	Initial Sample Result	Serial Dillution Result	% Diff	% Diff. Limit	Analysis Date
K1700745-001SDL							
Arsenic	6020A	532952	10.3	10.0	3	10	01/31/17 09:51
Zinc	6020A	532952	149	149	0	10	01/31/17 09:51

Client: ARCADIS U.S., Inc. **Service Request:** K1700745

Project: Closed Castner Firing Range/06261038.0001.00400

Detection Limits

Matrix: Soil

Analyte	Mass	Units	LOQ	LOD	MDL	Method
Arsenic	75	ug/L	1	0.25	0.08	6020A
Zinc	66	ug/L	1	1	0.4	6020A

Client: ARCADIS U.S., Inc. **Service Request:** K1700745

Project: Closed Castner Firing Range/06261038.0001.00400

ICP Linear Range (Quarterly)

Instrument: K-ICP-MS-05

Analyte	Concentration (ug/L)	Method
Arsenic 75	3000	6020A
Zinc 66	3000	6020A

Client: ARCADIS U.S., Inc. **Service Request:** K1700745

Project: Closed Castner Firing Range/06261038.0001.00400

Analysis Run Log

Instrument ID: **K-ICP-MS-05** **Analytical BatchID:** **532952**

Sample	Dilution Factor	Date/Time	As	Zn
ZZZZZZ	1	01/31/17 09:16		
ZZZZZZ	1	01/31/17 09:18		
ICV	1	01/31/17 09:21	X	X
CCV	1	01/31/17 09:23	X	X
ICB	1	01/31/17 09:25	X	X
CCB	1	01/31/17 09:27	X	X
LLICVS	1	01/31/17 09:30	X	X
ZZZZZZ	1	01/31/17 09:32		
ICSA	1	01/31/17 09:34	X	X
ICSAB	1	01/31/17 09:36	X	X
ZZZZZZ	1	01/31/17 09:41		
KQ1700836-01MB	5	01/31/17 09:43	X	X
KQ1700836-02LCS	20	01/31/17 09:46	X	X
K1700745-001	5	01/31/17 09:48	X	X
K1700745-001SDL	25	01/31/17 09:51	X	X
K1700745-001PS	5	01/31/17 09:53	X	
K1700745-001MS	5	01/31/17 09:55	X	X
K1700745-001DMS	5	01/31/17 09:57	X	X
K1700745-002	5	01/31/17 09:59	X	X
K1700745-003	5	01/31/17 10:02		X
K1700745-001PS	5	01/31/17 10:08	X	
CCV	1	01/31/17 10:10	X	X
CCB	1	01/31/17 10:12	X	X
K1700745-004	5	01/31/17 10:15		X
K1700745-005	5	01/31/17 10:17		X
K1700745-006	5	01/31/17 10:19		X
K1700745-007	5	01/31/17 10:21		X
K1700745-008	5	01/31/17 10:23		X
K1700745-009	5	01/31/17 10:26		X
K1700745-010	5	01/31/17 10:33	X	X
K1700745-011	5	01/31/17 10:35	X	X
K1700745-012	5	01/31/17 10:37	X	X
K1700745-013	5	01/31/17 10:39		X
CCV	1	01/31/17 10:42	X	X
CCB	1	01/31/17 10:44	X	X
K1700745-014	5	01/31/17 10:46		X
K1700745-015	5	01/31/17 10:48		X

Client: ARCADIS U.S., Inc. **Service Request:** K1700745

Project: Closed Castner Firing Range/06261038.0001.00400

Analysis Run Log

Instrument ID: **K-ICP-MS-05** **Analytical BatchID:** **532952**

Sample	Dilution Factor	Date/Time	As	Zn
K1700745-016	5	01/31/17 10:51		X
K1700745-017	5	01/31/17 10:53	X	X
CCV	1	01/31/17 10:55	X	X
CCB	1	01/31/17 10:57	X	X
LLCCVS	1	01/31/17 11:00	X	X

Client: ARCADIS U.S., Inc. **Service Request:** K1700745

Project: Closed Castner Firing Range/06261038.0001.00400

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Instrument ID: **K-ICP-MS-05** **Analytical BatchID:** **532952**

Sample	Date/Time	Ge72He	Ge72H2
ZZZZZZ	01/31/17 09:16		
ZZZZZZ	01/31/17 09:18		
ICV	01/31/17 09:21	99	100
CCV	01/31/17 09:23	99	101
ICB	01/31/17 09:25	98	99
CCB	01/31/17 09:27	98	100
LLICVS	01/31/17 09:30	99	100
ZZZZZZ	01/31/17 09:32		
ICSA	01/31/17 09:34	90	93
ICSAB	01/31/17 09:36	93	93
ZZZZZZ	01/31/17 09:41		
KQ1700836-01MB	01/31/17 09:43	105	104
KQ1700836-02LCS	01/31/17 09:46	101	104
K1700745-001	01/31/17 09:48	95	94
K1700745-001SDL	01/31/17 09:51	99	101
K1700745-001PS	01/31/17 09:53	95	95
K1700745-001MS	01/31/17 09:55	97	95
K1700745-001DMS	01/31/17 09:57	96	95
K1700745-002	01/31/17 09:59	104	100
K1700745-003	01/31/17 10:02	94	92
ZZZZZZ	01/31/17 10:08		
CCV	01/31/17 10:10	107	106
CCB	01/31/17 10:12	105	104
K1700745-004	01/31/17 10:15	98	97
K1700745-005	01/31/17 10:17	95	94
K1700745-006	01/31/17 10:19	110	104
K1700745-007	01/31/17 10:21	112	108
K1700745-008	01/31/17 10:23	109	105
K1700745-009	01/31/17 10:26	109	104
K1700745-010	01/31/17 10:33	111	107
K1700745-011	01/31/17 10:35	106	103
K1700745-012	01/31/17 10:37	104	102
K1700745-013	01/31/17 10:39	111	107
CCV	01/31/17 10:42	112	112
CCB	01/31/17 10:44	109	110
K1700745-014	01/31/17 10:46	116	108
K1700745-015	01/31/17 10:48	110	107

Client: ARCADIS U.S., Inc. **Service Request:** K1700745

Project: Closed Castner Firing Range/06261038.0001.00400

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Instrument ID: **K-ICP-MS-05** **Analytical BatchID:** **532952**

Sample	Date/Time	Ge72He	Ge72H2
K1700745-016	01/31/17 10:51	104	103
K1700745-017	01/31/17 10:53	103	99
CCV	01/31/17 10:55	109	108
CCB	01/31/17 10:57	107	107
LLCCVS	01/31/17 11:00	107	107

Raw Data

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Total Solids

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Benchsheet

Service Request #:	**K1700291, KQ1700790, K1700680, K1700745, K1700504**	**Run #:**	**532319**
Test:	**TS**	**Balance ID:**	**K-BALANCE-50**
Method:	**160.3 Modified**		

Pan ID:	Lab Code:	Tare (g)	Wet Wt. (g)	Tare + Dry Wt. (g)	Dry Weight (g)	% Total Solids	RPD
	K1700291-007	6.337	5.042	11.242	4.91	97.3	
	K1700291-007DUP	6.363	5.182	11.400	5.04	97.2	<1
	K1700680-002	1.312	10.793	6.929	5.62	52.0	
	K1700680-004	1.315	10.482	3.782	2.47	23.5	
	K1700680-006	1.314	10.104	3.931	2.62	25.9	
	K1700745-001	1.317	10.643	10.471	9.15	86.0	
	K1700745-002	1.308	10.289	9.630	8.32	80.9	
	K1700745-003	1.304	10.062	9.799	8.50	84.4	
	K1700745-004	1.298	12.693	12.983	11.7	92.1	
	K1700745-005	1.308	11.139	11.447	10.1	91.0	
	K1700745-006	1.289	11.443	11.006	9.72	84.9	
	K1700745-007	1.302	10.493	10.151	8.85	84.3	
	K1700745-007DUP	1.302	10.775	10.432	9.13	84.7	<1
	K1700745-008	1.319	10.407	10.360	9.04	86.9	
	K1700745-009	1.294	10.322	10.726	9.43	91.4	
	K1700745-010	1.306	10.988	11.151	9.85	89.6	
	K1700745-011	1.31	11.118	10.746	9.44	84.9	
	K1700745-012	1.289	10.222	10.312	9.02	88.3	
	K1700745-013	1.314	10.527	11.504	10.2	96.8	
	K1700745-014	1.322	10.392	10.921	9.60	92.4	
	K1700745-015	1.306	12.322	12.359	11.1	89.7	
	K1700745-016	1.317	10.112	10.930	9.61	95.1	
	K1700745-017	1.298	10.431	10.376	9.08	87.0	
	K1700504-001	1.317	11.225	12.486	11.2	99.5	
	K1700504-001DUP	1.311	14.227	15.463	14.2	99.5	<1

	Oven ID	Temp In	Temp Out	Date In	Time In	Date Out	Time Out	Thermometer ID
Oven1	**K-Oven-07**	**105**	**105**	**1/25/2017**	**17:02**	**1/26/2017**	**09:07**	

	Cal EQID	Cal Start Value	Cal End Value	Start Date	Start Time	End Date	End Time
Calibration1	**K-BALANCE-50**	**1.000, 99.998**	**0.999, 99.999**	**1/25/2017**	**11:23**	**1/25/2017**	**17:02**
Calibration2	**K-BALANCE-50**	**0.999, 99.996**	**1.000, 99.997**	**1/26/2017**	**09:32**	**1/26/2017**	**09:36**

Comments: DJM Weight set serial No. 42868 Reviewed by SC 1/26/17

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Preparation Information Benchsheet

Prep Run: 280406
Team: Metals
Analyst: [redacted]

Prep Workflow: MetDigSICP
Prep Method: EPA 3050B
Rush/NPDES: N/A

Status: Prepped
Current Step: Digestion

Prep Date: 01/25/2017 15:42
Due Date: 02/05/2017
Hold Date: 07/17/2017

Lab Code	Client ID	Bottle #	Initial Amt	Initial Basis	Final Volume	Spike Amt	Spike ID	Comments
KQ1700836-01	Method Blank		1.0 g		100 mL			10%HNO3, 10% HCl
KQ1700836-02	Lab Control Sample		1.03 g 1.00g	SL 2/6/17	100 mL	2 mL 1 mL 1 mL 1 mL	177744 178641 178642 178652	10%HNO3, 10% HCl
K1700745-001	FTBL-SED-060-0-6-011817	.02	1.038 g	As recieved	100 mL			10%HNO3, 10% HCl
K1700745-001: KQ1700836-03	Matrix Spike	.02	1.027 g	As recieved	100 mL	2 mL 1 mL 1 mL 1 mL	177744 178641 178642 178652	10%HNO3, 10% HCl
K1700745-001: KQ1700836-04	Duplicate Matrix Spike	.02	1.063 g	As recieved	100 mL	2 mL 1 mL 1 mL 1 mL	177744 178641 178642 178652	10%HNO3, 10% HCl
K1700745-002	FTBL-SED-061-0-6-011817	.02	1.088 g	As recieved	100 mL			10%HNO3, 10% HCl
K1700745-003	FTBL-SED-057-0-6-011817	.02	1.039 g	As recieved	100 mL			10%HNO3, 10% HCl
K1700745-004	FTBL-SED-056-0-6-011817	.02	1.129 g	As recieved	100 mL			10%HNO3, 10% HCl
K1700745-005	FTBL-SED-055-0-6-011817	.02	1.088 g	As recieved	100 mL			10%HNO3, 10% HCl
K1700745-006	FTBL-SED-054-0-6-011817	.02	1.145 g	As recieved	100 mL			10%HNO3, 10% HCl
K1700745-007	FTBL-SED-053-0-6-011817	.02	1.035 g	As recieved	100 mL			10%HNO3, 10% HCl
K1700745-008	FTBL-SED-066-0-6-011817	.02	1.054 g	As recieved	100 mL			10%HNO3, 10% HCl
K1700745-009	FTBL-SED-065-0-6-011817	.02	1.067 g	As recieved	100 mL			10%HNO3, 10% HCl
K1700745-010	FTBL-SED-063-0-6-011817	.02	1.043 g	As recieved	100 mL			10%HNO3, 10% HCl
K1700745-011	FTBL-SED-064-0-6-011817	.02	1.053 g	As recieved	100 mL			10%HNO3, 10% HCl
K1700745-012	FD-011817-1	.02	1.054 g	As recieved	100 mL			10%HNO3, 10% HCl
K1700745-013	FTBL-SED-068-0-6-012417	.02	1.030 g	As recieved	100 mL			10%HNO3, 10% HCl
K1700745-014	FTBL-SED-067-0-6-012417	.02	1.092 g	As recieved	100 mL			10%HNO3, 10% HCl
K1700745-015	FTBL-SED-058-0-6-012417	.02	1.032 g	As recieved	100 mL			10%HNO3, 10% HCl
K1700745-016	FTBL-SED-059-0-6-012417	.02	1.079 g	As recieved	100 mL			10%HNO3, 10% HCl
K1700745-017	FTBL-SED-062-0-6-012417	.02	1.059 g	As recieved	100 mL			10%HNO3, 10% HCl

21 Total Samples consisting of 17 Client Samples, 2 Client QC Samples, 2 Batch QC Samples associated

with the current Prep Run.

Spiking Solutions

Name	Type	ID	Expires	Name	Type	ID	Expires
K-MET SS1	Spike	177744	4/8/2017	K-MET SS4	Spike	178642	8/15/2017
K-MET SS3	Spike	178641	3/18/2017	K-MET SS5	Spike	178652	6/4/2017

Preparation Materials

Step	Name	ID	Step	Name	ID
All	Teflon Chips	80163	All	K-MET HCL	178073
All	K-MET H2O2	175797	All	K-MET 100ml Centrifuge Tube	178771
All	K-MET HNO3	178047			

Preparation Hardware / Equipment

Step	Name	Property	Value		Step	Name	Property	Value	
Digestion	K-BlockDigester-01	Corrected Temperature	95	deg C	Digestion	K-BlockDigester-01	Thermometer ID 3147615		NONE
Digestion	K-BlockDigester-01	Correction Factor	0	deg C	Digestion	K-BlockDigester-01	Thermometer Location	10	NONE
Digestion	K-BlockDigester-01	Observed Temperature	95	deg C	Weigh	K-Balance-02	Date Checked	1/27/2017	

Preparation Steps

Step	Started	Finished	By	Assisted By	Training?	Comments
Weigh	25-JAN-17 15:42	27-JAN-17 10:30	Juanita Hinson		N	
Digestion	27-JAN-17 11:07	27-JAN-17 15:07	Juanita Hinson		N	

Comments

R1: 15 min; R2: 150 min; R3: 15 min

Review

Reviewed by: _____ Date: 1/30/17

METALS SPIKING SOLUTIONS CONCENTRATIONS FORM

Solution Name	Element	mLs of 1000ppm Solution	Final Volume	Solution Conc. mg/L	Enter mls Added
K-MET SS1 *** Add after HNO3 and before ALS-89 when making the solution	HNO3	50.0	1000ml	-	
	Al	100*	1000ml	200	
	Ag	100*	1000ml	5	
	Ba	100*	1000ml	100	
	Be	100*	1000ml	5	
	Cd	100*	1000ml	5	
	Co	100*	1000ml	50	
	Cr	100*	1000ml	20	
	Cu	100*	1000ml	25	
	Fe	100*	1000ml	100	
	Pb	100*	1000ml	50	
	Mn	100*	1000ml	50	
	Ni	100*	1000ml	50	
	Sb***	50	1000ml	50	
	V	100*	1000ml	50	
	Zn	100*	1000ml	50	
K-MET SS2	HNO3	25.0	500ml	-	
	As	2.0	500ml	4	
	Cd	2.0	500ml	4	
	Pb	2.0	500ml	4	
	Se	2.0	500ml	4	
	Tl	2.0	500ml	4	
	Cu	2.0	500ml	4	
K-MET SS3	HNO3	25.0	500ml	-	
	As	50.0	500ml	100	
	Se	50.0	500ml	100	
	Tl	10.0	500ml	20	
	Hg	6	500	12	
K-MET SS4	HNO3	25	500ml	-	
	B	50	500ml	100	
	Mo	50	500ml	100	
K-MET SS5	HNO3	10.0	200ml	-	
	K**	20	200ml	1000	
	Na**	20	200ml	1000	
	Mg**	20	200ml	1000	
	Ca**	20	200ml	1000	

K-MET GFLCSW	HNO3	10.0	1000ml	-	
	As, Pb, Se, Tl	5.0	1000ml	2.5	
	Cd	-	-	1.25	
	Cu	2.5	1000ml	2.5	
K-MET QCP-CICV-1	Ca, Mg, Na, K	no dilution	-	2500	
	Al, Ba	no dilution	-	1000	
	Fe	no dilution	-	500	
	Co, Mn, Ni, V, Zn	no dilution	-	250	
	Cu, Ag	no dilution	-	125	
	Cr	no dilution	-	100	
	Be	no dilution	-	25	
K-MET QCP-CICV-3	As, Pb, Se, Tl	no dilution	-	500	
	Cd	no dilution	-	250	

* Denotes volume of mixed stock standard.
** Denotes 10,000 ppm individual stock standards.

Standard	mls of standard	ppm	Logbook #	Exp. Date

Service Request #	K1700745		
Calibration	013117AMS05		
QC in calibration	013117AMS05		
QC Service Request #	K1700745		
STARLIMS run #	532952		
CAL STD	MS21-42-I	ICSA STD	MS21-42-A
ICV STD	MS21-42-D	ICSAB STD	MS21-42-B
LLICV STD	MS21-42-E	INT STD	MS21-34-B

6020A DOD Data Review Form

	Yes	No	NA
1. Mass calibration <0.1 amu?	X		
2. Resolution <0.9 amu at 10% peak height?	X		
3. Stability RSD ≤5% for five replicates?	X		
4. Appropriate standardization completed?	X		
5. ICV within 10% of true value?	X		
6. CCV's within 10% of true?	X		
7. ICB/CCB's <LOD?	X		
8. Initial Low-level cal. check ± 20%	X		
9. ICSA/ICSAB within ± 20%	X		
10. Method blank <½ the LOQ?	X		
11. LCS within 80-120% DoD limit?	X		
12. Spikes within 80-120% DoD limit?	X		
13. Duplicate Spike RPD <20% DoD limit?	X		
14. Serial dilution within 10%?	X		
15. Post spike within 80-120% DoD limit?	X		
16. Internal standards within 30-120%?	X		
17. Linear range established with High CCV?	X		
18. Adequate rinse out time allowed?	X		
19. Interferences checked?	X		
20. Se over MRL?			X
21. Cd Correction Applied?			X
22. Was run prematurely stopped, If so why?		X	

Comments: LRS= 1000 ppb.

Primary Review by [redacted] Date 1/31/17

Secondary Review by [redacted] Date 2/1/17

R:\icp\misc\data review forms\icpms review form

Data Review Form

Service Request #:	**K1700745**
Instrument ID#:	**K-ICP-MS-05**
DataFile Name:	**R:\ICP\WIP\DATA\K-ICP-MS-05 (Agilent)\013117A.csv**
RUNNO:	**532952**

There are no issues to report.

Primary Approver: _____ 1/31/17

Secondary Approver: 3L 2/1/17

Page 1 of 1

	Sample						
		Rjct	Data File	Acq. Date-Time	Type	Sample Name	Comment
1			001CALB.	1/31/2017 9:14:26 AM	CalBlk	Prime	
2			002CALB.	1/31/2017 9:16:41 AM	CalBlk	Blank	
3			003CALS.	1/31/2017 9:18:55 AM	CalStd	25ppb	
4			004_ICV.d	1/31/2017 9:21:08 AM	ICV	ICV	
5			005_CCV.	1/31/2017 9:23:23 AM	CCV	CCV	
6			006_ICB.d	1/31/2017 9:25:37 AM	ICB	ICB	
7			007_CCB.	1/31/2017 9:27:51 AM	CCB	CCB	
8			008LICV.d	1/31/2017 9:30:06 AM	LLICV	LLICVS	
9			009SMPL.	1/31/2017 9:32:21 AM	Sample	LRSTD	
10			010ICSA.d	1/31/2017 9:34:39 AM	ICSA	ICSA	
11			011ICSB.d	1/31/2017 9:36:53 AM	ICSB	ICSAB	
12			012ICSB.d	1/31/2017 9:41:18 AM	ICSB	ICSAB	
13			013_PB.d	1/31/2017 9:43:33 AM	PB	KQ1700836-01	5
14			014_LCS.d	1/31/2017 9:46:33 AM	LCS	KQ1700836-02	20
15			015_ARF.d	1/31/2017 9:48:46 AM	AllRef	K1700745-001	5
16			016SMPL.	1/31/2017 9:51:00 AM	Sample	K1700745-001L	25
17			017_PDS.d	1/31/2017 9:53:14 AM	PDS	K1700745-001A	5
18			018_Spk.d	1/31/2017 9:55:26 AM	Spike	K1700745-001S	5
19			019_Spk.d	1/31/2017 9:57:38 AM	Spike	K1700745-001S	5
20			020SMPL.	1/31/2017 9:59:52 AM	Sample	K1700745-002	5
21			021SMPL.	1/31/2017 10:02:45 AM	Sample	K1700745-003	5
22			022SMPL.	1/31/2017 10:08:18 AM	Sample	K1700745-001A	5
23			023_CCV.	1/31/2017 10:10:33 AM	CCV	CCV	
24			024_CCB.	1/31/2017 10:12:47 AM	CCB	CCB	
25			025SMPL.	1/31/2017 10:15:01 AM	Sample	K1700745-004	5
26			026SMPL.	1/31/2017 10:17:15 AM	Sample	K1700745-005	5
27			027SMPL.	1/31/2017 10:19:28 AM	Sample	K1700745-006	5
28			028SMPL.	1/31/2017 10:21:42 AM	Sample	K1700745-007	5
29			029SMPL.	1/31/2017 10:23:57 AM	Sample	K1700745-008	5
30			030SMPL.	1/31/2017 10:26:10 AM	Sample	K1700745-009	5
31			031SMPL.	1/31/2017 10:33:08 AM	Sample	K1700745-010	5
32			032SMPL.	1/31/2017 10:35:21 AM	Sample	K1700745-011	5
33			033SMPL.	1/31/2017 10:37:36 AM	Sample	K1700745-012	5
34			034SMPL.	1/31/2017 10:39:50 AM	Sample	K1700745-013	5
35			035_CCV.	1/31/2017 10:42:05 AM	CCV	CCV	

	Sample						
		Rjct	Data File	Acq. Date-Time	Type	Sample Name	Comment
36			036_CCB.	1/31/2017 10:44:19 AM	CCB	CCB	
37			037SMPL.	1/31/2017 10:46:37 AM	Sample	K1700745-014	5
38			038SMPL.	1/31/2017 10:48:51 AM	Sample	K1700745-015	5
39			039SMPL.	1/31/2017 10:51:05 AM	Sample	K1700745-016	5
40			040SMPL.	1/31/2017 10:53:20 AM	Sample	K1700745-017	5
41			041_CCV.	1/31/2017 10:55:34 AM	CCV	CCV	
42			042_CCB.	1/31/2017 10:57:48 AM	CCB	CCB	
43			043LCCV.	1/31/2017 11:00:02 AM	LLCCV	LLCCVS	

Analyte				
Name		Mass	ISTD	Tune Mode
1	Zn	66	72	He
2	As	75	72	He
3	Se	77	72	H2
4	Se	78	72	H2
5	Ge	72		He
6	Ge	72		H2

	Sample						
		Rjct	Data File	Acq. Date-Time	Type	Sample Name	Comment
44			044SMPL.	1/31/2017 11:02:16 AM	Sample	CCV	

US EPA Tune Check Sample Report

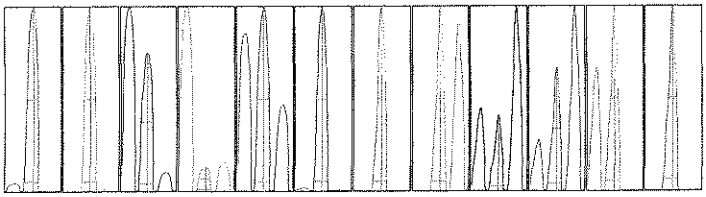
Batch Folder D:\Data\Experiments\013117A.b
Report Comment ALS Tune
Instrument Name G3281A JP13482848

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
7	101290	0.78	5.00	
9	26756	0.74	5.00	
24	146613	0.36	5.00	
25	19398	0.90	5.00	
26	22233	0.12	5.00	
59	172980	0.47	5.00	
115	267173	0.85	5.00	
206	82201	0.91	5.00	
207	75462	0.91	5.00	
208	182027	0.77	5.00	
209	269915	0.40	5.00	
238	405525	0.71	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
7	101978	101613	101494	101448	99918
9	26792	26655	26690	26565	27077
24	146208	147480	146456	146208	146710
25	19606	19495	19437	19288	19162
26	22251	22223	22262	22234	22193
59	174023	172652	172856	171904	173465
115	269528	268438	268281	264057	265560
206	83446	81717	82374	81693	81776
207	76257	75564	75943	74580	74967
208	184100	181335	182695	180496	181511
209	271512	270173	268767	270108	269017
238	407939	406559	407811	401199	404117

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
7	17218	7.05	6.9 - 7.1		0.771	0.900	
9	4572	9.00	8.9 - 9.1		0.781	0.900	
24	24633	23.95	23.9 - 24.1		0.781	0.900	
25	3273	25.00	24.9 - 25.1		0.776	0.900	
26	3815	25.95	25.9 - 26.1		0.778	0.900	
59	31608	58.95	58.9 - 59.1		0.764	0.900	
115	56084	115.00	114.9 - 115.1		0.724	0.900	
206	18031	206.00	205.9 - 206.1		0.777	0.900	
207	16502	207.00	206.9 - 207.1		0.739	0.900	
208	40041	208.00	207.9 - 208.1		0.746	0.900	
209	59731	209.00	208.9 - 209.1		0.749	0.900	
238	86839	238.00	237.9 - 238.1		0.770	0.900	

X% = 5 **Integration Time [sec] =** 0.1 **Acquisition Time [sec] =** 279 **Y Axis =** Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.57	L/min			
RF Matching	1.76	V	Option Gas	0.0	%			
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps			
S/C Temp	2	°C						

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	5.1	V			
Extract 2	-115.0	V	Cell Entrance	-30	V			
Omega Bias	-70	V	Cell Exit	-50	V			
Deflect	10.6	V						

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	false		3rd Gas Flow	0	%			
He Flow	0.0	mL/min	OctP Bias	-8.0	V			
H2 Flow	0.0	mL/min	OctP RF	200	V			
Energy Discrimination	5.0	V						

Calibration Blank Report

Sample Table

Sample Name	Blank
Data File Name	002CALB.d
Data Path Name	D:\Data\Experiments\013117A2.b
Acq Date Time	2017-01-31T09:16:41-08:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	Tune Mode	CPS	%RSD
Zn	66	He	51	74.76
As	75	He	8	392.90
Se	77	H2	483	1.30
Se	78	H2	12	318.23

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD
Ge	72	He	56893	1.33
Ge	72	H2	734296	0.91

Calibration Standard Report

Sample Table

Sample Name	25ppb
Data File Name	003CALS.d
Data Path Name	D:\Data\Experiments\013117A2.b
Acq Date Time	2017-01-31T09:18:55-08:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	CPS	%RSD
Zn	66	He	7995	0.05
As	75	He	3255	0.03
Se	77	H2	4857	0.06
Se	78	H2	13778	0.01

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	56483	0.94	56893	99.28	30	120	
Ge	72	H2	737789	0.37	734296	100.48	30	120	

Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICV
Data File Name	004_ICV.d
Data Path Name	D:\Data\Experiments\013117A2.b
Acq Date Time	2017-01-31T09:21:08-08:00
Sample Type	ICV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Zn	66	He	25.186	4.046	8020	3.39	25	101	
As	75	He	26.221	1.814	3400	2.07	25	105	
Se	77	H2	26.317	1.361	5075	1.26	25	105	
Se	78	H2	26.011	0.926	14302	1.10	25	104	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	56261	0.64	56893	98.89	30	120	
Ge	72	H2	736044	0.28	734296	100.24	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	005_CCV.d
Data Path Name	D:\Data\Experiments\013117A2.b
Acq Date Time	2017-01-31T09:23:23-08:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Zn	66	He	24.917	3.556	7907	3.58	25	100	
As	75	He	25.350	1.817	3276	2.43	25	101	
Se	77	H2	25.241	0.461	4901	0.60	25	101	
Se	78	H2	25.029	0.499	13802	0.29	25	100	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	56059	0.98	56893	98.53	30	120	
Ge	72	H2	738182	0.22	734296	100.53	30	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB
Data File Name	006_ICB.d
Data Path Name	D:\Data\Experiments\013117A2.b
Acq Date Time	2017-01-31T09:25:37-08:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Zn	66	He	0.054	69.9	67	17.3	1	
As	75	He	-0.014	-173.6	6	56.7	0.25	
Se	77	H2	-0.145	-173.8	454	8.9	20	
Se	78	H2	-0.006	-177.0	9	63.5	0.5	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	55532	0.55	56893	97.61	30	120	
Ge	72	H2	728305	0.96	734296	99.18	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	007_CCB.d
Data Path Name	D:\Data\Experiments\013117A2.b
Acq Date Time	2017-01-31T09:27:51-08:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Zn	66	He	-0.028	-54.7	41	12.4	1	
As	75	He	-0.028	-127.3	4	114.6	0.25	
Se	77	H2	-0.088	-77.8	468	2.2	20	
Se	78	H2	-0.004	-20.9	10	6.0	0.5	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	55761	1.49	56893	98.01	30	120	
Ge	72	H2	735692	0.97	734296	100.19	30	120	

Low Level Initial Calibration Verification (LLICV) Report

Sample Table

Sample Name	LLICVS
Data File Name	008LICV.d
Data Path Name	D:\Data\Experiments\013117A2.b
Acq Date Time	2017-01-31T09:30:06-08:00
Sample Type	LLICV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Zn	66	He	0.832	21.861	314	18.06	1	83	
As	75	He	1.164	8.943	159	9.46	1	116	
Se	77	H2	1.719	9.214	779	3.81	2	86	
Se	78	H2	2.102	2.521	1160	3.23	2	105	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	56401	0.96	56893	99.14	30	120	
Ge	72	H2	731689	0.74	734296	99.64	30	120	

Sample Report

Sample Table

Sample Name	LRSTD
Data File Name	009SMPL.d
Data Path Name	D:\Data\Experiments\013117A2.b
Acq Date Time	2017-01-31T09:32:21-08:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Zn	66	He	907.884	0.80	286686	0.32	
As	75	He	985.688	0.62	127231	0.77	
Se	77	H2	1005.304	1.28	173305	0.58	
Se	78	H2	999.377	0.85	541085	0.18	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	56131	1.54	56893	98.66	30	120	
Ge	72	H2	725428	1.12	734296	98.79	30	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA
Data File Name	010ICSA.d
Data Path Name	D:\Data\Experiments\013117A2.b
Acq Date Time	2017-01-31T09:34:39-08:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	QC Flag
Zn	66	He	0.469	18.3	181	12.3	
As	75	He	0.201	15.1	31	12.3	
Se	77	H2	1.761	4.2	733	2.0	
Se	78	H2	0.134	21.3	79	19.0	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	51277	1.31	56893	90.13	30	120	
Ge	72	H2	681671	1.10	734296	92.83	30	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB
Data File Name	011ICSB.d
Data Path Name	D:\Data\Experiments\013117A2.b
Acq Date Time	2017-01-31T09:36:53-08:00
Sample Type	ICSB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Zn	66	He	20.316	4.697	6099	4.43	25	81.3	
As	75	He	25.316	1.863	3090	1.71	25	101.3	
Se	77	H2	27.194	1.066	4841	1.63	25	108.8	
Se	78	H2	25.117	0.782	12788	1.31	25	100.5	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	52956	0.33	56893	93.08	30	120	
Ge	72	H2	681552	0.69	734296	92.82	30	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB
Data File Name	012ICSB.d
Data Path Name	D:\Data\Experiments\013117A2.b
Acq Date Time	2017-01-31T09:41:18-08:00
Sample Type	ICSB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

not needed BJ 1/2/17

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Zn	66	He	21.989	4.237	6684	4.26	25	88.0	
As	75	He	26.748	3.222	3307	3.75	25	107.0	
Se	77	H2	28.123	1.862	5126	0.98	25	112.5	
Se	78	H2	26.448	0.708	13832	0.61	25	105.8	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	53646	0.79	56893	94.29	30	120	
Ge	72	H2	700147	0.99	734296	95.35	30	120	

Prep Blank (PB) Report

Sample Table

Sample Name	KQ1700836-01
Data File Name	013_PB.d
Data Path Name	D:\Data\Experiments\013117A2.b
Acq Date Time	2017-01-31T09:43:33-08:00
Sample Type	PB
Dilution	1
Comment	S
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Zn	66	He	0.391	4.6	184	2.8	1	
As	75	He	0.022	33.5	11	9.1	0.25	
Se	77	H2	-0.084	-103.6	486	2.7	2	
Se	78	H2	0.016	34.3	21	14.3	0.5	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	59599	0.57	56893	104.76	30	120	
Ge	72	H2	762884	0.57	734296	103.89	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	KQ1700836-02
Data File Name	014_LCS.d
Data Path Name	D:\Data\Experiments\013117A2.b
Acq Date Time	2017-01-31T09:46:33-08:00
Sample Type	LCS
Dilution	1
Comment	20
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Zn	66	He	45.736	2.604	14901	2.03	50	91.5	
As	75	He	49.981	0.459	6642	1.00	50	100.0	
Se	77	H2	48.977	0.363	9399	0.14	50	98.0	
Se	78	H2	48.733	0.874	27885	1.13	50	97.5	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	57724	0.56	56893	101.46	30	120	
Ge	72	H2	766282	0.45	734296	104.36	30	120	

All Reference Sample Report

Sample Table

Sample Name	K1700745-001
Data File Name	015_ARF.d
Data Path Name	D:\Data\Experiments\013117A2.b
Acq Date Time	2017-01-31T09:48:46-08:00
Sample Type	AllRef
Dilution	1
Comment	5
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Zn	66	He	149.095	0.17	45203	0.33	
As	75	He	10.335	6.06	1287	0.80	
Se	77	H2	2.500	3.44	862	0.29	
Se	78	H2	0.522	3.78	280	0.19	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	53840	0.68	56893	94.63	30	120	
Ge	72	H2	689911	0.70	734296	93.96	30	120	

Sample Report

Sample Table

Sample Name	K1700745-001L
Data File Name	016SMPL.d
Data Path Name	D:\Data\Experiments\013117A2.b
Acq Date Time	2017-01-31T09:51:00-08:00
Sample Type	Sample
Dilution	1
Comment	25
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Zn	66	He	29.814	1.89	9459	0.32	
As	75	He	2.007	2.65	266	0.75	
Se	77	H2	0.554	4.00	585	0.09	
Se	78	H2	0.104	15.43	70	0.15	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	56091	1.81	56893	98.59	30	120	
Ge	72	H2	741211	0.23	734296	100.94	30	120	

Post Digestion Spike Sample (PDS) Report

Sample Table

Sample Name	K1700745-001A
Data File Name	017_PDS.d
Data Path Name	D:\Data\Experiments\013117A2.b
Acq Date Time	2017-01-31T09:53:14-08:00
Sample Type	PDS
Dilution	1
Comment	5
QC Ref File Name	015_ARF.d
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Spk Amt	%Rec	QC Flag
Zn	66	He	188.739	0.828	57660	0.48	50	79	
As	75	He	66.056	1.862	8251	2.57	50	111	
Se	77	H2	60.705	1.405	10479	1.62	50	116	
Se	78	H2	57.366	1.984	29831	1.50	50	114	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	54266	0.75	56893	95.38	30	120	
Ge	72	H2	696505	0.51	734296	94.85	30	120	

Matrix Spike Sample (MS) Report

Sample Table

Sample Name	K1700745-001S
Data File Name	018_Spk.d
Data Path Name	D:\Data\Experiments\013117A2.b
Acq Date Time	2017-01-31T09:55:26-08:00
Sample Type	Spike
Dilution	1
Comment	5
QC Ref File Name	015_ARF.d
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Spk Amt	%Rec	QC Flag
Zn	66	He	334.451	1.636	103391	1.10	200	93	
As	75	He	226.032	1.396	28560	1.43	200	108	
Se	77	H2	224.031	0.682	37301	0.52	200	111	
Se	78	H2	219.880	1.540	113887	0.79	200	110	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	54938	1.67	56893	96.56	30	120	
Ge	72	H2	693944	0.76	734296	94.50	30	120	

Matrix Spike Sample (MS) Report

Sample Table

Sample Name	K1700745-001SD
Data File Name	019_Spk.d
Data Path Name	D:\Data\Experiments\013117A2.b
Acq Date Time	2017-01-31T09:57:38-08:00
Sample Type	Spike
Dilution	1
Comment	5
QC Ref File Name	015_ARF.d
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Spk Amt	%Rec	QC Flag
Zn	66	He	316.402	1.435	97299	1.03	200	84	
As	75	He	223.691	0.601	28115	0.52	200	107	
Se	77	H2	219.303	0.761	36828	1.19	200	108	
Se	78	H2	216.693	0.791	113173	0.41	200	108	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	5464S	1.00	56893	96.05	30	120	
Ge	72	H2	699702	0.52	734296	95.29	30	120	

Sample Report

Sample Table

Sample Name	K1700745-002
Data File Name	020SMPL.d
Data Path Name	D:\Data\Experiments\013117A2.b
Acq Date Time	2017-01-31T09:59:52-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Zn	66	He	207.599	0.60	69283	0.30	
As	75	He	19.371	5.78	2649	0.73	
Se	77	H2	3.472	7.60	1088	0.32	
Se	78	H2	1.161	3.24	649	0.18	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	59285	0.38	56893	104.20	30	120	
Ge	72	H2	735101	0.39	734296	100.11	30	120	

Sample Report

Sample Table

Sample Name	K1700745-003
Data File Name	021SMPL.d
Data Path Name	D:\Data\Experiments\013117A2.b
Acq Date Time	2017-01-31T10:02:45-08:00
Sample Type	Sample
Dilution	1
Comment	S
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Zn	66	He	84.590	1.61	25469	0.33	
As	75	He	8.357	4.02	1034	0.81	
Se	77	H2	2.456	8.01	838	0.29	
Se	78	H2	0.549	3.86	288	0.19	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	53434	1.65	56893	93.92	30	120	
Ge	72	H2	676319	0.21	734296	92.10	30	120	

Sample Report

Sample Table

Sample Name	K1700745-001A
Data File Name	022SMPL.d
Data Path Name	D:\Data\Experiments\013117A2.b
Acq Date Time	2017-01-31T10:08:18-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

+ 600ppb

not needed 2/1/17

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Zn	66	He	645.149	0.52	200192	0.32	
As	75	He	609.738	1.41	77334	0.79	
Se	77	H2	610.307	1.01	103511	0.59	
Se	78	H2	605.384	0.51	321907	0.19	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	55152	1.10	56893	96.94	30	120	
Ge	72	H2	712431	0.84	734296	97.02	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	023_CCV.d
Data Path Name	D:\Data\Experiments\013117A2.b
Acq Date Time	2017-01-31T10:10:33-08:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Zn	66	He	24.509	4.356	8427	3.52	25	98	
As	75	He	25.101	0.753	3514	1.50	25	100	
Se	77	H2	24.857	2.697	5083	2.13	25	99	
Se	78	H2	24.997	0.172	14494	0.22	25	100	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	60742	0.80	56893	106.76	30	120	
Ge	72	H2	776186	0.30	734296	105.70	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	024_CCB.d
Data Path Name	D:\Data\Experiments\013117A2.b
Acq Date Time	2017-01-31T10:12:47-08:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Zn	66	He	-0.050	-18.4	37	9.1	1	
As	75	He	0.002	1813.4	8	56.7	0.25	
Se	77	H2	-0.073	-320.0	489	8.8	20	
Se	78	H2	0.041	44.4	36	28.4	0.5	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	59680	0.69	56893	104.90	30	120	
Ge	72	H2	763266	0.82	734296	103.95	30	120	

Sample Report

Sample Table

Sample Name	K1700745-004
Data File Name	025SMPL.d
Data Path Name	D:\Data\Experiments\013117A2.b
Acq Date Time	2017-01-31T10:15:01-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Zn	66	He	226.902	1.09	71164	0.32	
As	75	He	15.851	3.93	2038	0.78	
Se	77	H2	2.822	7.12	944	0.30	
Se	78	H2	0.482	8.38	268	0.18	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	55719	0.61	56893	97.94	30	120	
Ge	72	H2	711974	0.89	734296	96.96	30	120	

Sample Report

Sample Table

Sample Name	K1700745-005
Data File Name	026SMPL.d
Data Path Name	D:\Data\Experiments\013117A2.b
Acq Date Time	2017-01-31T10:17:15-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Zn	66	He	130.554	1.00	39682	0.33	
As	75	He	18.557	3.66	2310	0.80	
Se	77	H2	3.846	4.48	1082	0.36	
Se	78	H2	0.319	11.64	176	0.18	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	53967	0.90	56893	94.86	30	120	
Ge	72	H2	689631	1.23	734296	93.92	30	120	

Sample Report

Sample Table

Sample Name	K1700745-006
Data File Name	027SMPL.d
Data Path Name	D:\Data\Experiments\013117A2.b
Acq Date Time	2017-01-31T10:19:28-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Zn	66	He	527.338	1.39	185242	0.28	
As	75	He	23.258	4.15	3347	0.69	
Se	77	H2	2.679	4.13	991	0.27	
Se	78	H2	1.029	2.47	601	0.17	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	62437	1.41	56893	109.74	30	120	
Ge	72	H2	766817	0.57	734296	104.43	30	120	

Sample Report

Sample Table

Sample Name	K1700745-007
Data File Name	028SMPL.d
Data Path Name	D:\Data\Experiments\013117A2.b
Acq Date Time	2017-01-31T10:21:42-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Zn	66	He	325.259	0.41	117044	0.28	
As	75	He	29.847	3.23	4397	0.68	
Se	77	H2	2.131	12.79	921	0.23	
Se	78	H2	0.888	5.56	538	0.17	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	63940	0.77	56893	112.39	30	120	
Ge	72	H2	792021	1.14	734296	107.86	30	120	

Sample Report

Sample Table

Sample Name	K1700745-008
Data File Name	029SMPL.d
Data Path Name	D:\Data\Experiments\013117A2.b
Acq Date Time	2017-01-31T10:23:57-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Zn	66	He	192.154	1.89	67280	0.29	
As	75	He	13.215	2.81	1898	0.70	
Se	77	H2	1.438	6.81	769	0.19	
Se	78	H2	0.514	2.49	308	0.17	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	62190	0.92	56893	109.31	30	120	
Ge	72	H2	770021	0.73	734296	104.87	30	120	

Sample Report

Sample Table

Sample Name	K1700745-009
Data File Name	030SMPL.d
Data Path Name	D:\Data\Experiments\013117A2.b
Acq Date Time	2017-01-31T10:26:10-08:00
Sample Type	Sample
Dilution	1
Comment	S
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Zn	66	He	229.908	2.25	80240	0.29	
As	75	He	12.005	3.04	1721	0.70	
Se	77	H2	1.733	5.71	819	0.21	
Se	78	H2	0.546	8.76	325	0.17	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	62020	2.11	56893	109.01	30	120	
Ge	72	H2	766293	0.11	734296	104.36	30	120	

Sample Report

Sample Table

Sample Name	K1700745-010
Data File Name	031SMPL.d
Data Path Name	D:\Data\Experiments\013117A2.b
Acq Date Time	2017-01-31T10:33:08-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Zn	66	He	199.091	0.39	70620	0.28	
As	75	He	13.746	2.88	2000	0.69	
Se	77	H2	3.257	2.06	1126	0.29	
Se	78	H2	1.014	4.10	609	0.17	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	63010	1.23	56893	110.75	30	120	
Ge	72	H2	787518	0.56	734296	107.25	30	120	

Sample Report

Sample Table

Sample Name	K1700745-011
Data File Name	0325MPL.d
Data Path Name	D:\Data\Experiments\013117A2.b
Acq Date Time	2017-01-31T10:35:21-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Zn	66	He	297.133	1.04	100408	0.30	
As	75	He	16.268	3.29	2254	0.72	
5e	77	H2	2.071	7.51	871	0.24	
Se	78	H2	0.647	6.05	379	0.17	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	60046	1.20	56893	105.54	30	120	
Ge	72	H2	758703	0.88	734296	103.32	30	120	

Sample Report

Sample Table

Sample Name	K1700745-012
Data File Name	033SMPL.d
Data Path Name	D:\Data\Experiments\013117A2.b
Acq Date Time	2017-01-31T10:37:36-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Zn	66	He	203.979	2.17	67613	0.30	
As	75	He	13.078	1.86	1779	0.74	
Se	77	H2	1.981	5.57	845	0.23	
Se	78	H2	0.513	4.45	299	0.17	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	58896	1.87	56893	103.52	30	120	
Ge	72	H2	749866	0.91	734296	102.12	30	120	

Sample Report

Sample Table

Sample Name	K1700745-013
Data File Name	034SMPL.d
Data Path Name	D:\Data\Experiments\013117A2.b
Acq Date Time	2017-01-31T10:39:50-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Zn	66	He	116.545	0.59	41372	0.28	
As	75	He	10.629	4.91	1548	0.69	
Se	77	H2	1.820	7.68	854	0.21	
Se	78	H2	0.464	3.78	284	0.16	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	63022	0.87	56893	110.77	30	120	
Ge	72	H2	784301	1.65	734296	106.81	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	035_CCV.d
Data Path Name	D:\Data\Experiments\013117A2.b
Acq Date Time	2017-01-31T10:42:05-08:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Zn	66	He	24.317	2.744	8772	2.48	25	97	
As	75	He	25.203	1.159	3701	1.04	25	101	
Se	77	H2	25.341	2.049	5488	2.15	25	101	
Se	78	H2	25.173	0.870	15485	0.72	25	101	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	63718	0.63	56893	112.00	30	120	
Ge	72	H2	823496	0.51	734296	112.15	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	036_CCB.d
Data Path Name	D:\Data\Experiments\013117A2.b
Acq Date Time	2017-01-31T10:44:19-08:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Zn	66	He	-0.004	-1298.7	54	35.4	1	
As	75	He	-0.029	-59.0	4	58.1	0.25	
Se	77	H2	0.007	2260.0	530	5.7	20	
Se	78	H2	0.006	190.9	17	40.8	0.5	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	62100	2.32	56893	109.15	30	120	
Ge	72	H2	804486	1.02	734296	109.56	30	120	

Sample Report

Sample Table

Sample Name	K1700745-014
Data File Name	037SMPL.d
Data Path Name	D:\Data\Experiments\013117A2.b
Acq Date Time	2017-01-31T10:46:37-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Zn	66	He	207.226	1.62	76764	0.27	
As	75	He	25.794	1.52	3912	0.66	
Se	77	H2	4.644	9.49	1398	0.33	
Se	78	H2	1.362	3.52	821	0.17	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	65805	0.85	56893	115.66	30	120	
Ge	72	H2	794977	0.09	734296	108.26	30	120	

Sample Report

Sample Table

Sample Name	K1700745-015
Data File Name	038SMPL.d
Data Path Name	D:\Data\Experiments\013117A2.b
Acq Date Time	2017-01-31T10:48:51-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Zn	66	He	179.491	1.20	63457	0.28	
As	75	He	16.308	2.32	2363	0.69	
Se	77	H2	2.090	10.77	908	0.23	
Se	78	H2	0.643	5.74	391	0.16	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	62796	0.72	56893	110.37	30	120	
Ge	72	H2	787540	1.01	734296	107.25	30	120	

Sample Report

Sample Table

Sample Name	K1700745-016
Data File Name	039SMPL.d
Data Path Name	D:\Data\Experiments\013117A2.b
Acq Date Time	2017-01-31T10:51:05-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Zn	66	He	216.847	2.17	72039	0.30	
As	75	He	16.352	3.53	2227	0.73	
Se	77	H2	2.147	6.83	883	0.24	
Se	78	H2	0.460	7.23	273	0.17	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	59020	1.46	56893	103.74	30	120	
Ge	72	H2	757220	0.98	734296	103.12	30	120	

Sample Report

Sample Table

Sample Name	K1700745-017
Data File Name	040SMPL.d
Data Path Name	D:\Data\Experiments\013117A2.b
Acq Date Time	2017-01-31T10:53:20-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Zn	66	He	260.307	1.02	85832	0.30	
As	75	He	16.466	1.53	2226	0.74	
Se	77	H2	3.504	9.69	1083	0.32	
Se	78	H2	0.668	8.30	375	0.18	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	58586	2.12	56893	102.97	30	120	
Ge	72	H2	727837	0.99	734296	99.12	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	041_CCV.d
Data Path Name	D:\Data\Experiments\013117A2.b
Acq Date Time	2017-01-31T10:55:34-08:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Zn	66	He	24.350	2.599	8573	2.41	25	97	
As	75	He	25.438	1.829	3646	1.98	25	102	
Se	77	H2	24.671	3.133	5140	2.53	25	99	
Se	78	H2	25.715	0.629	15181	1.49	25	103	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	62186	0.17	56893	109.30	30	120	
Ge	72	H2	790278	0.99	734296	107.62	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	042_CCB.d
Data Path Name	D:\Data\Experiments\013117A2.b
Acq Date Time	2017-01-31T10:57:48-08:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Zn	66	He	0.010	254.7	58	14.5	1	
As	75	He	0.010	106.2	10	15.8	0.25	
Se	77	H2	-0.110	-110.5	498	4.0	20	
Se	78	H2	-0.008	-35.4	8	18.3	0.5	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	60799	0.27	56893	106.86	30	120	
Ge	72	H2	788890	0.84	734296	107.43	30	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLCCVS
Data File Name	043LCCV.d
Data Path Name	D:\Data\Experiments\013117A2.b
Acq Date Time	2017-01-31T11:00:02-08:00
Sample Type	LLCCV
Dilution	1
Comment	
ISTD Ref File Name	002CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Zn	66	He	1.139	9.749	442	6.32	1	114	
As	75	He	1.098	5.825	161	7.24	1	110	
Se	77	H2	1.919	12.320	876	4.42	2	96	
Se	78	H2	2.041	3.522	1212	3.04	2	102	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	60643	2.50	56893	106.59	30	120	
Ge	72	H2	787473	1.09	734296	107.24	30	120	

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401 E. Main Street, Suite 400
El Paso, TX 79901

March 30, 2017

SUBJECT: Fort Bliss, Castner Range, Data Validation

Enclosed is the final validation report for the fraction listed below. This SDG was received on February 27, 2017. Attachment 1 is a summary of the samples that were reviewed for each analysis.

LDC Project #38178:

SDG #	**Fraction:**
K1700699 K1700745 K1700776	Metals, Explosives

The data validation was performed under Level III & IV guidelines. The analyses were validated using the following documents, as applicable to each method:

- Final Quality Assurance Project Plan, Military Munitions Response Program Remedial Investigation, Closed Castner Firing Range, Fort Bliss, El Paso, Texas, February 2015
- U.S. Department of Defense Quality Systems Manual for Environmental Laboratories, 5.0, July 2013
- USEPA, Contract Laboratory Program National Functional Guidelines for Superfund Oragnic Methods Data Review, October 1999
- USEPA, Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review, October 2004
- EPA SW 846, Third Edition, Test Methods for Evaluating Solid Waste, update 1, July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III, December 1996; update IIIA, April 1998; IIIB, November 2004; update IV, February 2007; update V, July 2014

Please feel free to contact us if you have any questions.

EDD 90/10 ADR/IV

LDC #38178 (Arcadis-Millersville, MD / Fort Bliss, Castner Range)

LDC	SDG#	DATE REC'D	(2) DATE DUE	(7) Metals (6020A)		(7) Metals (6010C)		Sb,Pb (6020A)		As,Zn (6020A)		Pb (6020A)		Zn (6020A)		Expl. (8330B)																					
Matrix: Water/Soil-Sediment				W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S
A	K1700699	02/27/17	03/13/17	0	6	-	-	0	1	-	-	-	-	-	-	0	2																		
B	K1700745	02/27/17	03/13/17	-	-	-	-	-	-	0	6	-	-	0	11	-	-																		
C	K1700776	02/27/17	03/13/17	0	2	-	-	0	2	-	-	0	1	-	-	0	0																		
C	K1700776	02/27/17	03/13/17	0	1	-	-	0	1	-	-	-	-	-	-	0	1																		
D	FA41143	02/27/17	03/13/17	-	-	0	1	-	-	-	-	-	-	-	-	0	1																		
Total	T/PG			0	9	0	1	0	4	0	6	0	1	0	11	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36

Shaded cells indicate Level IV validation (all other cells are ADR validation). These sample counts do not include MS/MSD, and DUPs

L:\Arcadis\Fort Bliss-Castner Range\38178ST.wpd

Data Validation Report
Fort Bliss, Castner Range

SDGs: K1700699, K1700745, and K1700776

Prepared for

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Prepared by

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March 29, 2017

INTRODUCTION

This Data Validation Report (DVR) presents Level III and Level IV data validation results for samples collected during the January 2017 sampling period. Data validation was performed in accordance with the Final Quality Assurance Project Plan (QAPP), Military Munitions Response Program Remedial Investigation, Closed Castner Firing Range, Fort Bliss, El Paso, Texas (February 2015), the U.S. Department of Defense (DoD) Quality Systems Manual (QSM) for Environmental Laboratories, Version 5.0 (July 2013), a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines (CLPNFG) for Organic Superfund Data Review (October 1999) and the EPA CLPNFG for Inorganic Superfund Data Review (October 2004). Where specific guidance is not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Explosives by Environmental Protection Agency (EPA) SW 846 Method 8330B
Metals by EPA SW 846 Method 6020A

The sample identification and methods of analyses performed on each sample is presented in Attachment 1. Overall data qualification summary is presented in Attachment 2. Level III Automated Data Review outliers are presented in Enclosure I. DVRs for samples on which Level IV validation was performed are presented in Enclosure II.

All sample results were subjected to Level III data validation, which comprises an evaluation of quality control (QC) summary results for sample holding times, initial and continuing calibrations, initial and continuing calibration blanks (ICB/CCBs), laboratory blanks, interference check (ICSA and ICSAB) samples, surrogates, matrix spike/matrix spike duplicates (MS/MSD), serial dilutions, laboratory control sample (LCS), laboratory triplicate samples (TRP), standard reference materials (SRM), field duplicates and triplicates, and split samples. Approximately 10 percent of samples were subjected to Level IV evaluation as indicated in Attachment 1, which comprises a review of the QC summary forms as well as the raw data, to confirm sample quantitation and identification.

Automated data review was performed on all QC summary results using the Automated Data Review (ADR) software program (LDC, 2013) with exception of the calibrations, calibration blanks, interference check samples, serial dilutions, and split samples, which were validated manually. Quality assurance (QA)/QC criteria specified in the QAPP, DoD QSM and CLPNFGs were incorporated with the program's reference library to assess compliance with project requirements.

The following are definitions of the data qualifiers:

J (Estimated): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated due to non-conformances discovered during data validation.

U (Non-detected): The compound or analyte was analyzed for and positively identified by the laboratory; however the analyte should be considered non-detect at the reported concentration due to the presence of contaminants detected in the associated blank(s).

UJ (Non-detected estimated): The compound or analyte was reported as not detected by the laboratory; however the reported quantitation/detection limit is estimated due to non-conformances discovered during data validation.

R (Rejected): The sample results were rejected due to gross non-conformances discovered during data validation. Data qualified as rejected is not usable.

NJ (Presumptive): Presumptive evidence of presence of the compound at an estimated quantity.

NA (Not applicable): Data did not warrant qualification since detected results only are affected and the compound was not detected in the associated samples.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

I. Sample Receipt & Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

II. Initial Calibration and Initial Calibration Verification

All criteria for the initial calibration and initial calibration verifications of the method were met.

III. Continuing Calibration

All criteria for the continuing calibration verifications of the method were met.

IV. Laboratory Blanks

Laboratory blanks were performed as required by the methods. No contaminant concentrations were detected in the laboratory blanks reviewed by the ADR software with the exception of two blanks for antimony and two blanks for several explosives. The associated sample results were qualified as non-detected (U) due to laboratory blank contamination as applicable. The sample results that were either not detected or were significantly greater (>5x blank contaminants) than the concentrations found in the associated laboratory blank were not qualified. The details regarding the qualification of data are provided in Enclosure I.

No contaminant concentrations were detected in the initial or continuing calibration blanks with the following exceptions:

SDG/ Method	Laboratory Blank ID	Analyte	Maximum Concentration	Associated Samples
K1700699/ 6020A	ICB/CCB	Antimony	0.021 ug/L	FTBL-IS-187-012317-A FTBL-IS-187-012317-B FTBL-IS-187-012317-C FTBL-IS-190-012317 FTBL-IS-186-012317

Sample concentrations were compared to concentrations detected in the laboratory blanks. The sample concentrations were not detected or were significantly greater than the concentrations found in the associated blanks, therefore no data were qualified.

V. Field Blanks

No field blanks were identified in these SDGs.

VI. Surrogates

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met.

VIII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were performed on an associated project sample. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the exception of antimony in two MS/MSD pairs. No data were qualified for antimony MS/MSD %R outside QC limits when the post spike recovery was within QC limits.

IX. Triplicate Sample Analysis

Triplicate (TRP) sample analysis was performed on an associated project sample. Results were within QC limits.

X. Serial Dilution

Serial dilution analysis was performed on an associated project sample. The analysis criteria were met.

XI. Laboratory Control Samples/Standard Reference Materials

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

Standard reference materials (SRM) were analyzed for explosives. Percent recoveries (%R) were within QC limits.

XII. Field Duplicates/Field Triplicates/Split Samples

One field duplicate pair was collected and analyzed for metals. All RPDs were within QC limits. The field duplicate result comparisons are provided in Enclosure I.

One set of field triplicates was collected and analyzed for metals and explosives. All RSDs were within QC limits with the exception of several metals. The associated sample results were qualified as detected estimated (J). The field triplicate result comparisons are provided in Enclosure I.

Samples FTBL-SED-064-0-6-011817 and FTBL-SED-064-0-6-011817-QA (from SDG FA40657) were identified as split duplicate samples. No metals were detected in any of the split samples with the following exceptions:

Analyte	Concentration (mg/Kg)		RPD (≤50)	Flag	A or P
	FTBL-SED-064-0-6-011817 (SDG: K1700745)	FTBL-SED-064-0-6-011817-QA (SDG: FA40657)			
Arsenic	9.10	6.2	38	-	-

Analyte	Concentration (mg/Kg)		RPD (≤50)	Flag	A or P
	FTBL-SED-064-0-6-011817 (SDG: K1700745)	FTBL-SED-064-0-6-011817-QA (SDG: FA40657)			
Zinc	166	124	29	-	-

XIII. Compound Quantitation

The laboratory reporting limits were evaluated. All laboratory reporting limits met the specified requirements.

All compounds reported below the LOQ as detected by the laboratory were qualified as detected estimated (J). The details regarding the qualification of data are provided in Enclosure I.

All compound quantitations were within validation criteria with the following exceptions:

SDG/ Method	Sample	Compound	Finding	Criteria	Flag	A or P
K1700699/ 8330B	FTBL-IS-191-012317	3-Nitrotoluene	2nd column confirmation was not performed for this compound.	2nd column confirmation should be performed for all detected results	NJ (all detects)	A
K1700776/ 8330B	FTBL-IS-157-012517	3-Nitrotoluene	2nd column confirmation was not performed for this compound.	2nd column confirmation should be performed for all detected results	NJ (all detects)	A

XIV. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in these SDGs.

Due to field triplicate RSD, data were qualified as estimated in three samples.

Due to results not being confirmed, data were qualified as presumptive and estimated in two samples.

Due to laboratory blank contamination, data were qualified as non-detect in two samples.

The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable. Sample results that were found to be estimated (J) are usable for limited purposes only. Based upon the data validation all other results are considered valid and usable for all purposes.

Data flags are summarized and are presented as Attachment 2

Attachment 1

Sample Cross Reference

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
18-Jan-2017	FD-011817-1	K1700745-012	FD	EPA 3050B	6020A	III
18-Jan-2017	FTBL-SED-060-0-6-011817	K1700745-001	N	EPA 3050B	6020A	III
18-Jan-2017	FTBL-SED-060-0-6-011817MS	KQ1700836-03	MS	EPA 3050B	6020A	III
18-Jan-2017	FTBL-SED-061-0-6-011817	K1700745-002	N	EPA 3050B	6020A	III
18-Jan-2017	FTBL-SED-057-0-6-011817	K1700745-003	N	EPA 3050B	6020A	III
18-Jan-2017	FTBL-SED-056-0-6-011817	K1700745-004	N	EPA 3050B	6020A	III
18-Jan-2017	FTBL-SED-055-0-6-011817	K1700745-005	N	EPA 3050B	6020A	III
18-Jan-2017	FTBL-SED-054-0-6-011817	K1700745-006	N	EPA 3050B	6020A	III
18-Jan-2017	FTBL-SED-053-0-6-011817	K1700745-007	N	EPA 3050B	6020A	III
18-Jan-2017	FTBL-SED-066-0-6-011817	K1700745-008	N	EPA 3050B	6020A	III
18-Jan-2017	FTBL-SED-065-0-6-011817	K1700745-009	N	EPA 3050B	6020A	III
18-Jan-2017	FTBL-SED-063-0-6-011817	K1700745-010	N	EPA 3050B	6020A	III
18-Jan-2017	FTBL-SED-064-0-6-011817	K1700745-011	N	EPA 3050B	6020A	III
23-Jan-2017	FTBL-IS-187-012317-A	K1700699-001	FT	EPA 3050B	6020A	III
23-Jan-2017	FTBL-IS-187-012317-AMS	K1700699-001MS	MS	EPA 3050B	6020A	III
23-Jan-2017	FTBL-IS-187-012317-AMSD	K1700699-001SD	MSD	EPA 3050B	6020A	III
23-Jan-2017	FTBL-IS-187-012317-B	K1700699-002	N	EPA 3050B	6020A	III
23-Jan-2017	FTBL-IS-187-012317-C	K1700699-003	N	EPA 3050B	6020A	III
23-Jan-2017	FTBL-IS-188-012317	K1700699-004	N	EPA 3050B	6020A	III
23-Jan-2017	FTBL-IS-188-012317	K1700699-004	N	EPA 3535A	8330B	III
23-Jan-2017	FTBL-IS-188-012317MS	K1700699-004MS	MS	EPA 3050B	6020A	III
23-Jan-2017	FTBL-IS-188-012317RE	K1700699-004RE	N	EPA 3050B	6020A	III
23-Jan-2017	FTBL-IS-188-012317RE	K1700699-004RE	N	EPA 3535A	8330B	III
23-Jan-2017	FTBL-IS-188-012317MS	K1700699-004REMS	MS	EPA 3050B	6020A	III
23-Jan-2017	FTBL-IS-188-012317MSD	K1700699-004RESD	MSD	EPA 3050B	6020A	III
23-Jan-2017	FTBL-IS-188-012317MSD	K1700699-004SD	MSD	EPA 3050B	6020A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
23-Jan-2017	FTBL-IS-188-012317REP1	KWG1700911-1	REP	EPA 3535A	8330B	III
23-Jan-2017	FTBL-IS-188-012317REP3	KWG1700911-2	REP	EPA 3535A	8330B	III
23-Jan-2017	FTBL-IS-188-012317MS	KWG1700911-3	MS	EPA 3535A	8330B	III
23-Jan-2017	FTBL-IS-188-012317MSD	KWG1700911-4	MSD	EPA 3535A	8330B	III
23-Jan-2017	FTBL-IS-190-012317	K1700699-005	N	EPA 3050B	6020A	III
23-Jan-2017	FTBL-IS-191-012317	K1700699-006	N	EPA 3050B	6020A	III
23-Jan-2017	FTBL-IS-191-012317	K1700699-006	N	EPA 3535A	8330B	III
23-Jan-2017	FTBL-IS-191-012317RE	K1700699-006RE	N	EPA 3050B	6020A	III
23-Jan-2017	FTBL-IS-186-012317	K1700699-007	N	EPA 3050B	6020A	III
24-Jan-2017	FTBL-SED-068-0-6-012417	K1700745-013	N	EPA 3050B	6020A	III
24-Jan-2017	FTBL-SED-067-0-6-012417	K1700745-014	N	EPA 3050B	6020A	III
24-Jan-2017	FTBL-SED-058-0-6-012417	K1700745-015	N	EPA 3050B	6020A	III
24-Jan-2017	FTBL-SED-059-0-6-012417	K1700745-016	N	EPA 3050B	6020A	III
24-Jan-2017	FTBL-SED-062-0-6-012417	K1700745-017	N	EPA 3050B	6020A	III
25-Jan-2017	FTBL-IS-176-012517	K1700776-001	N	EPA 3050B	6020A	III
25-Jan-2017	FTBL-IS-183-012517	K1700776-002	N	EPA 3050B	6020A	III
25-Jan-2017	FTBL-IS-183-012517RE	K1700776-002RE	N	EPA 3050B	6020A	III
25-Jan-2017	FTBL-IS-184-012517	K1700776-003	N	EPA 3050B	6020A	III
25-Jan-2017	FTBL-IS-184-012517RE	K1700776-003RE	N	EPA 3050B	6020A	III
25-Jan-2017	FTBL-IS-185-012517	K1700776-004	N	EPA 3050B	6020A	IV
25-Jan-2017	FTBL-IS-185-012517RE	K1700776-004RE	N	EPA 3050B	6020A	IV
25-Jan-2017	FTBL-IS-157-012517	K1700776-005	N	EPA 3050B	6020A	IV
25-Jan-2017	FTBL-IS-157-012517	K1700776-005	N	EPA 3535A	8330B	IV
25-Jan-2017	FTBL-IS-157-012517RE	K1700776-005RE	N	EPA 3050B	6020A	IV
25-Jan-2017	FTBL-IS-156-012517	K1700776-006	N	EPA 3050B	6020A	III
25-Jan-2017	FTBL-IS-156-012517RE	K1700776-006RE	N	EPA 3050B	6020A	III

III = EPA Level 3 Data Review
IV = EPA Level 4 Data Validation
N = Normal Sample
FD = Field Duplicate
TB = Trip Blank
FB = Field Blank
MS = Matrix Spike
MSD = Matrix Spike Duplicate

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
25-Jan-2017	FTBL-IS-159-012517	K1700776-007	N	EPA 3050B	6020A	III
25-Jan-2017	FTBL-IS-159-012517RE	K1700776-007RE	N	EPA 3050B	6020A	III

III = EPA Level 3 Data Review
IV = EPA Level 4 Data Validation
N = Normal Sample
FD = Field Duplicate
TB = Trip Blank
FB = Field Blank
MS = Matrix Spike
MSD = Matrix Spike Duplicate

Attachment 2

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: K1700699, K1700745, K1700776 **Laboratory: ALS_K**

EDD Filename: K1700699.01_SEDD2A_rev, K1700745_SEDD2A_rev, K1700776_SEDD2A_rev **eQAPP Name: Arcadis_FtBliss_ALS_160627**

SDG: K1700699

Method Category: METALS
Method: 6020A ***Matrix:*** Soil

1/23/2017
Sample ID: FTBL-IS-187-012317-A ***Collected:*** AM ***Analysis Type:*** Initial ***Dilution:*** 5.0

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.725	J	0.025	LOD	0.050	LOQ	mg/Kg	J	Ft
LEAD	80.2	=	0.05	LOD	0.05	LOQ	mg/Kg	J	Ft

1/23/2017
Sample ID: FTBL-IS-187-012317-B ***Collected:*** AM ***Analysis Type:*** Initial ***Dilution:*** 5.0

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.419	J	0.025	LOD	0.050	LOQ	mg/Kg	J	Ft
LEAD	67.4	=	0.05	LOD	0.05	LOQ	mg/Kg	J	Ft

1/23/2017
Sample ID: FTBL-IS-187-012317-C ***Collected:*** AM ***Analysis Type:*** Initial ***Dilution:*** 5.0

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.762	J	0.025	LOD	0.049	LOQ	mg/Kg	J	Ft
LEAD	138	=	0.05	LOD	0.05	LOQ	mg/Kg	J	Ft

Method Category: SVOA
Method: 8330B ***Matrix:*** Soil

1/23/2017
Sample ID: FTBL-IS-191-012317 ***Collected:*** PM ***Analysis Type:*** Initial2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3-NITROTOLUENE	0.020	JN	0.041	LOD	0.082	LOQ	mg/Kg	U	Mb, ProfJudg

SDG: K1700776

Method Category: SVOA
Method: 8330B ***Matrix:*** Soil

1/25/2017
Sample ID: FTBL-IS-157-012517 ***Collected:*** PM ***Analysis Type:*** Initial ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3-NITROTOLUENE	0.027	JN	0.041	LOD	0.081	LOQ	mg/Kg	U	Mb, ProfJudg

* denotes a non-reportable result

Project Name and Number: 06261038.0001.00400 - Closed Castner Firing Range

Data Qualifier Summary

Lab Reporting Batch ID: K1700699, K1700745, K1700776

Laboratory: ALS_K

EDD Filename: K1700699.01_SEDD2A_rev, K1700745_SEDD2A_rev, K1700776_SEDD2A_rev

eQAPP Name: Arcadis_FtBliss_ALS_160627

Reason Code Legend

Reason Code	*Description*
Ft	Field Triplicate Precision
Mb	Method Blank Contamination
Ms	Matrix Spike Lower Estimation
ProfJudg	Professional Judgment
RI	Reporting Limit Trace Value

* denotes a non-reportable result

Project Name and Number: 06261038.0001.00400 - Closed Castner Firing Range

Enclosure I

Level III ADR Outliers

(Including Manual Review Outliers)

Quality Control
Outlier Reports

K1700699

Method Blank Outlier Report

Lab Reporting Batch ID: K1700699 **Laboratory: ALS_K**

EDD Filename: K1700699.01_SEDD2A **eQAPP Name: Arcadis_FtBliss_ALS_160627**

Method: **6020A**
Matrix: **Soil**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
KQ1701038-03RE	2/6/2017 7:11:00 AM	ANTIMONY	0.011 mg/Kg	FTBL-IS-188-012317 FTBL-IS-188-012317RE FTBL-IS-191-012317 FTBL-IS-191-012317RE
KQ1701094-01	2/6/2017 8:57:00 AM	ANTIMONY	0.021 mg/Kg	FTBL-IS-186-012317 FTBL-IS-187-012317-A FTBL-IS-187-012317-B FTBL-IS-187-012317-C FTBL-IS-190-012317

Method: **8330B**
Matrix: **Soil**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
KWG1700911-8	2/10/2017 12:52:00 PM	1,3-DINITROBENZENE 3-NITROTOLUENE	0.013 mg/Kg 0.023 mg/Kg	FTBL-IS-188-012317 FTBL-IS-188-012317RE FTBL-IS-191-012317

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
FTBL-IS-191-012317(Initial2)	3-NITROTOLUENE	0.020 mg/Kg	0.020U mg/Kg

Project Name and Number: 06261038.0001.00400 - Closed Castner Firing Range

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: K1700699 **Laboratory: ALS_K**

EDD Filename: K1700699.01_SEDD2A **eQAPP Name: Arcadis_FtBliss_ALS_160627**

Method: **6020A**
Matrix: **Soil**

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
FTBL-IS-188-012317MS (Dry) FTBL-IS-188-012317MSD (Dry) (FTBL-IS-188-012317)	ANTIMONY	35	36	72.00-124.00	-	ANTIMONY	No Qual, Post Spike = 100%
FTBL-IS-187-012317-AMS (Dry) FTBL-IS-187-012317-AMSD (Dry) (FTBL-IS-187-012317-A)	ANTIMONY	31	32	72.00-124.00	-	ANTIMONY	No Qual, Post Spike = 103%

Field Triplicate RSD Report

Lab Reporting Batch ID: K1700699 **Laboratory: ALS_K**

EDD Filename: K1700699.01_SEDD2A **eQAPP Name: Arcadis_FtBliss_ALS_160627**

Method: 6020A
Matrix: Soil

Analyte	*Concentration (mg/Kg)*			*Sample RSD/RPD*	*eQAPP RSD/RPD*	*Flag*
	FTBL-IS-187-012317-A	**FTBL-IS-187-012317-B**	**FTBL-IS-187-012317-C**			
ARSENIC	5.70	6.11	5.98	3.53	20.00	No Qualifiers Applied
BERYLLIUM	1.02	1.05	1.08	2.86	20.00	
COPPER	22.1	21.7	24.4	6.41	20.00	
NICKEL	10.1	9.89	10.0	1.05	20.00	
ZINC	63.5	60.0	65.0	4.08	20.00	
ANTIMONY	0.725	0.419	0.762	29.63	20.00	J(all detects)
LEAD	80.2	67.4	138	39.51	20.00	

* - RPD was calculated and compared against library RPD because only two samples among the triplicate set had detected results.
NC - (Not Calculated) is reported if only one sample among the triplicate set has a detected result.

Project Name and Number: 06261038.0001.00400 - Closed Castner Firing Range

Reporting Limit Outliers

Lab Reporting Batch ID: K1700699 **Laboratory: ALS_K**

EDD Filename: K1700699.01_SEDD2A **eQAPP Name: Arcadis_FtBliss_ALS_160627**

Method: **8330B**

Matrix: **Soil**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
FTBL-IS-191-012317	3-NITROTOLUENE	JN	0.020	0.082	LOQ	mg/Kg	J (all detects)

LDC #: 38178A4a
SDG #: K1700699
Laboratory: ALS Environmental

VALIDATION COMPLETENESS WORKSHEET
ADR

Date: 3/3/17
Page: 1 of 1

METHOD: Metals (EPA SW 846 Method 6020A)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A /N A	
II.	ICP/MS Tune	A	
III.	Instrument Calibration	A	
IV.	ICP Interference Check Sample (ICS) Analysis	A	
V.	Laboratory Blanks	SW	ICB/CCB only PBW,T
VI.	Field Blanks	N	
VII.	Matrix Spike/Matrix Spike Duplicates	N	8/9, 10/11 Sb MS/D out, PS in, no qual
VIII.	Duplicate sample analysis	N	
IX.	Serial Dilution	A	
X.	Laboratory control samples	N	LCS
XI.	Field Duplicates	—	
XII.	Internal Standard (ICP-MS)	N	
XIII.	Sample Result Verification	N	
XIV.	Overall Assessment of Data	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID	Lab ID	Matrix	Date
1	FTBL-IS-187-012317-A	K1700699-001	Soil	11/23/17
2	FTBL-IS-187-012317-B	K1700699-002	Soil	11/23/17
3	FTBL-IS-187-012317-C	K1700699-003	Soil	11/23/17
4	FTBL-IS-188-012317-A	K1700699-004	Soil	11/23/17
5	FTBL-IS-190-012317-A	K1700699-005	Soil	11/23/17
6	FTBL-IS-191-012317-A	K1700699-006	Soil	11/23/17
7	FTBL-IS-186-012317-A	K1700699-007	Soil	11/23/17
8	FTBL-IS-187-012317-AMS	K1700699-001MS	Soil	11/23/17
9	FTBL-IS-187-012317-AMSD	K1700699-001MSD	Soil	11/23/17
10	FTBL-IS-188-012317-AMS	K1700699-004MS	Soil	11/23/17
11	FTBL-IS-188-012317-AMSD	K1700699-004MSD	Soil	11/23/17
12				
13				

Notes:

LDC #: 38578A4

VALIDATION FINDINGS WORKSHEET
Sample Specific Element Reference

[redacted]

All circled elements are applicable to each sample.

Sample ID	Matrix	Target Analyte List (TAL)
1-6		Al, (Sb), As, Ba, (Be), Cd, Ca, Cr, Co, (Cu), Fe, (Pb), Mg, Mn, Hg, (Ni), K, Se, Ag, Na, Tl, V, (Zn), Mo, B, Sn, Ti, ___ ___
7		Al, (Sb), As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, (Pb), Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
9(-8-11		Al, (Sb), (As), Ba, (Be), Cd, Ca, Cr, Co, (Cu), Fe, (Pb), Mg, Mn, Hg, (Ni), K, Se, Ag, Na, Tl, V, (Zn), Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
Analysis Method		
ICP		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
ICP-MS		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
GFAA		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___

Comments: Mercury by CVAA if performed

LDC #: 38178A4a

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

[redacted]

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000) Soil preparation factor applied: 100x x 5xdil
Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 1-3, 5, 7

				Sample Identification										
Analyte	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Level	No qualifiers (>5x)										
Sb		0.021	0.0525											

Samples with analyte concentrations within five times the associated ICB, CCB or PB concentration are listed above with the identifications from the Validation Completeness Worksheet. These sample results were qualified as not detected, "U".
Note : a - The listed analyte concentration is the highest ICB, CCB, or PB detected in the analysis of each element.

LDC #: 38178A40 **VALIDATION COMPLETENESS WORKSHEET** Date: 3/6/17
SDG #: K1700699 ADR Page: 1 of 1
Laboratory: ALS Environmental

[redacted]

METHOD: HPLC Explosives (EPA SW 846 Method 8330B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A	
II.	Initial calibration/ICV	A / A	RSD≤15%. ICV≤20%
III.	Continuing calibration	A	CCV≤20%
IV.	Laboratory Blanks	~~SW~~ N	
V.	Field blanks	N	
VI.	Surrogate spikes	N	
VII.	Matrix spike/Matrix spike duplicates / TRP	N/A	
VIII.	Laboratory control samples	N	
IX.	Field duplicates	N	
X.	Compound quantitation RL/LOQ/LODs	~~SW~~ N	
XI.	Target compound identification	N	
XII	Overall assessment of data	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID	Lab ID	Matrix	Date
1	FTBL-IS-188-012317-A	K1700699-004	Soil	11/23/17
2	FTBL-IS-191-012317-A	K1700699-006	Soil	11/23/17
3	FTBL-IS-188-012317-AMS	K1700699-004MS	Soil	11/23/17
4	FTBL-IS-188-012317-AMSD	K1700699-004MSD	Soil	11/23/17
5	FTBL-IS-188-012317-ADUP	K1700699-004DUP	Soil	11/23/17
6	FTBL-IS-188-012317-ATRP	K1700699-004TRP	Soil	11/23/17
7				
8				
9				
10				
11				

Notes:

LDC #: 38178A40

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

[redacted]

METHOD: ___ GC ✓ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Level IV/D Only

Y N N/A Were CRQLs adjusted for sample dilutions, dry weight factors, etc.?

Y N N/A Did the reported results for detected target compounds agree within 10.0% of the recalculated results?

Y N N/A Did the relative percent differences of detected compounds between two columns/detectors ≤40%?

If no, please see findings bellow.

#	Compound Name	Sample ID	%RPD Between Two Columns/Detectors Limit (≤ 40%)	Qualifications
	3-Nitrotoluene	2	no confirmation	NT dets/A

Comments: See sample calculation verification worksheet for recalculations

Quality Control
Outlier Reports

K1700745

Field Duplicate RPD Report

Lab Reporting Batch ID: K1700745 **Laboratory: ALS_K**

EDD Filename: K1700745_SEDD2A **eQAPP Name: Arcadis_FtBliss_ALS_160627**

Method: 6020A
Matrix: Soil

Analyte	*Concentration (mg/Kg)*		*Sample RPD*	*eQAPP RPD*	*Flag*
	FTBL-SED-064-0-6-011817	FD-011817-1 (Dry)			
ARSENIC	9.10	7.03	26	50.00	No Qualifiers Applied
ZINC	166	110	41	50.00	

Project Name and Number: 06261038.0001.00400 - Closed Castner Firing Range

LDC #: 38178B4a
SDG #: K1700745
Laboratory: ALS Environmental

VALIDATION COMPLETENESS WORKSHEET
ADR

Date: 3/3/17
Page: 1 of 2

[redacted]

METHOD: Metals (EPA SW 846 Method 6020A)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A /N	
II.	ICP/MS Tune	A	
III.	Instrument Calibration	A	
IV.	ICP Interference Check Sample (ICS) Analysis	A	
V.	Laboratory Blanks	A	ICB/CCB only
VI.	Field Blanks	N	
VII.	Matrix Spike/Matrix Spike Duplicates	N	
VIII.	Duplicate sample analysis	N	
IX.	Serial Dilution	A	
X.	Laboratory control samples	N	LCS
XI.	Field Duplicates	SW	split= 1 & FTBL-SED-061-0-6011817-QA (from FA40657)
XII.	Internal Standard (ICP-MS)	A	
XIII.	Sample Result Verification	N	
XIV.	Overall Assessment of Data	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID	Lab ID	Matrix	Date
1	FTBL-SED-060-0-6-011817	K1700745-001	Sediment	01/18/17
2	FTBL-SED-061-0-6-011817	K1700745-002	Sediment	01/18/17
3	FTBL-SED-057-0-6-011817	K1700745-003	Sediment	01/18/17
4	FTBL-SED-056-0-6-011817	K1700745-004	Sediment	01/18/17
5	FTBL-SED-055-0-6-011817	K1700745-005	Sediment	01/18/17
6	FTBL-SED-054-0-6-011817	K1700745-006	Sediment	01/18/17
7	FTBL-SED-053-0-6-011817	K1700745-007	Sediment	01/18/17
8	FTBL-SED-066-0-6-011817	K1700745-008	Sediment	01/18/17
9	FTBL-SED-065-0-6-011817	K1700745-009	Sediment	01/18/17
10	FTBL-SED-063-0-6-011817	K1700745-010	Sediment	01/18/17
11	FTBL-SED-064-0-6-011817	K1700745-011	Sediment	01/18/17
12	FD-011817-1	K1700745-012	Sediment	01/18/17
13	FTBL-SED-068-0-6-012417	K1700745-013	Sediment	01/24/17
14	FTBL-SED-067-0-6-012417	K1700745-014	Sediment	01/24/17
15	FTBL-SED-058-0-6-012417	K1700745-015	Sediment	01/24/17

LDC #: 38178B4a

SDG #: K1700745

Laboratory: ALS Environmental

VALIDATION COMPLETENESS WORKSHEET

ADR

Date: 3/3/17

[redacted]

METHOD: Metals (EPA SW 846 Method 6020A)

	Client ID	Lab ID	Matrix	Date
16	FTBL-SED-059-0-6-012417	K1700745-016	Sediment	01/24/17
17	FTBL-SED-062-0-6-012417	K1700745-017	Sediment	01/24/17
18	FTBL-SED-060-0-6-011817MS	K1700745-001MS	Sediment	01/18/17
19	FTBL-SED-060-0-6-011817MSD	K1700745-001MSD	Sediment	01/18/17
20				
21				
22				
23				
24				

Notes:

LDC #: 38178B4a

VALIDATION FINDINGS WORKSHEET
Sample Specific Element Reference

[redacted]

All circled elements are applicable to each sample.

Sample ID	Matrix	Target Analyte List (TAL)
1,2,10-12,17		Al, Sb, (As), Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, (Zn), Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
3-9, 13-16		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, (Zn), Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
RE: 18,9		Al, Sb, (As), Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, (Zn), Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
Analysis Method		
ICP		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
ICP-MS		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
GFAA		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___

Comments: Mercury by CVAA if performed

LDC#: 38178B4a

VALIDATION FINDINGS WORKSHEET

[redacted]

Field Duplicates

METHOD: Metals (EPA Method 6010B/7000)

Analyte	Concentration (mg/Kg)		RPD (≤50)	
	11	FTBL-SED-064-0-6-011817-QA		
Arsenic	9.10	6.2	38	
Zinc	166	124	29	

\\LDCFILESERVER\Validation\FIELD DUPLICATES\FD_inorganic\38178B4a.wpd

Quality Control
Outlier Reports

K1700776

Method Blank Outlier Report

Lab Reporting Batch ID: K1700776 **Laboratory: ALS_K**

EDD Filename: K1700776_SEDD2A **eQAPP Name: Arcadis_FtBliss_ALS_170316**

Method: **6020A**
Matrix: **Soil**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
KQ1701038-03RE	2/6/2017 7:11:00 AM	ANTIMONY	0.011 mg/Kg	FTBL-IS-156-012517 FTBL-IS-156-012517RE FTBL-IS-157-012517 FTBL-IS-157-012517RE FTBL-IS-159-012517 FTBL-IS-159-012517RE FTBL-IS-176-012517 FTBL-IS-183-012517 FTBL-IS-183-012517RE FTBL-IS-184-012517 FTBL-IS-184-012517RE FTBL-IS-185-012517 FTBL-IS-185-012517RE

Method: **8330B**
Matrix: **Soil**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
KWG1700911-7	2/7/2017 7:00:00 PM	1,3-DINITROBENZENE 3-NITROTOLUENE	0.11 mg/Kg 1.4 mg/Kg	FTBL-IS-157-012517
KWG1700911-7RE	2/10/2017 12:15:00 PM	1,3-DINITROBENZENE 3-NITROTOLUENE	0.082 mg/Kg 0.046 mg/Kg	FTBL-IS-157-012517

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
FTBL-IS-157-012517(Initial)	3-NITROTOLUENE	0.027 mg/Kg	0.027U mg/Kg

Project Name and Number: 06261038.0001.00400 - Closed Castner Firing Range

Reporting Limit Outliers

Lab Reporting Batch ID: K1700776 **Laboratory: ALS_K**

EDD Filename: K1700776_SEDD2A **eQAPP Name: Arcadis_FtBliss_ALS_170316**

Method: **8330B**

Matrix: **Soil**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
FTBL-IS-157-012517	3-NITROTOLUENE	JN	0.027	0.081	LOQ	mg/Kg	J (all detects)

Project Name and Number: 06261038.0001.00400 - Closed Castner Firing Range

LDC #: 38178C4a
SDG #: K1700776
Laboratory: ALS Environmental

VALIDATION COMPLETENESS WORKSHEET

ADR IV

Date: 3/3/17
Page: 1 of 1

[redacted]

METHOD: Metals (EPA SW 846 Method 6020A)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A /N	Not reviewed for ADR validation.
II.	ICP/MS Tune	A	
III.	Instrument Calibration	A	
IV.	ICP Interference Check Sample (ICS) Analysis	A	
V.	Laboratory Blanks	A	ICB/CCB only
VI.	Field Blanks	—	Not reviewed for ADR validation.
VII.	Matrix Spike/Matrix Spike Duplicates	A	Not reviewed for ADR validation. (from K1700699)
VIII.	Duplicate sample analysis	N	Not reviewed for ADR validation.
IX.	Serial Dilution	A	
X.	Laboratory control samples	A	Not reviewed for ADR validation.
XI.	Field Duplicates	—	Not reviewed for ADR validation.
XII.	Internal Standard (ICP-MS)	A	
XIII.	Sample Result Verification	—	Not reviewed for ADR validation.
XIV	Overall Assessment of Data	A	Not reviewed for ADR validation.

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

** Indicates sample was underwent Level IV review

	Client ID	Lab ID	Matrix	Date
1	FTBL-IS-176-012517	K1700776-001	Soil	01/25/17
2	FTBL-IS-183-012517	K1700776-002	Soil	01/25/17
3	FTBL-IS-184-012517	K1700776-003	Soil	01/25/17
4	FTBL-IS-185-012517**	K1700776-004**	Soil	01/25/17
5	FTBL-IS-157-012517**	K1700776-005**	Soil	01/25/17
6	FTBL-IS-156-012517	K1700776-006	Soil	01/25/17
7	FTBL-IS-159-012517	K1700776-007	Soil	01/25/17
8				
9				
10				
11				
12				
13				

Notes:

LDC #: 38178C40
SDG #: K1700776
Laboratory: ALS Environmental

VALIDATION COMPLETENESS WORKSHEET
ADR

Date: 3/6/17

[redacted]

METHOD: HPLC Explosives (EPA SW 846 Method 8330B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A	
II.	Initial calibration/ICV	A/A	
III.	Continuing calibration	A	
IV.	Laboratory Blanks	N	Not reviewed for ADR validation.
V.	Field blanks	N	
VI.	Surrogate spikes	N	Not reviewed for ADR validation.
VII.	Matrix spike/Matrix spike duplicates	N	Not reviewed for ADR validation.
VIII.	Laboratory control samples	N	Not reviewed for ADR validation.
IX.	Field duplicates	N	
X.	Compound quantitation RL/LOQ/LODs	SW	Not reviewed for ADR validation.
XI.	Target compound identification	N	Not reviewed for ADR validation.
XII.	Overall assessment of data	N	Not reviewed for ADR validation.

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

** Indicates sample was underwent Level IV review

	Client ID	Lab ID	Matrix	Date
1	~~FTBL-IS-176-012517~~	~~K1700776-001~~	~~Soil~~	~~01/25/17~~
2	FTBL-IS-183-012517	K1700776-002	Soil	01/25/17
3	FTBL-IS-184-012517	K1700776-003	Soil	01/25/17
4	~~FTBL-IS-185-012517**~~	~~K1700776-004**~~	~~Soil~~	~~01/25/17~~
5	FTBL-IS-157-012517**	K1700776-005**	Soil	01/25/17
6	~~FTBL-IS-156-012517~~	~~K1700776-006~~	~~Soil~~	~~01/25/17~~
7	~~FTBL-IS-159-012517~~	~~K1700776-007~~	~~Soil~~	~~01/25/17~~
8				
9				
10				
11				

Notes:

LDC #: 38178c40

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

[redacted]

METHOD: ___ GC ✓ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Level IV/D Only

Y N N/A Were CRQLs adjusted for sample dilutions, dry weight factors, etc.?

Y N N/A Did the reported results for detected target compounds agree within 10.0% of the recalculated results?

Y N N/A Did the relative percent differences of detected compounds between two columns/detectors ≤40%?

If no, please see findings bellow.

#	Compound Name	Sample ID	%RPD Between Two Columns/Detectors Limit (≤ 40%)	Qualifications
	3-Nitrotoluene	[redacted]S	No confirmation	NJ detects/A
	A	A		

Comments: See sample calculation verification worksheet for recalculations

Enclosure II

Level IV Data Validation Reports

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Fort Bliss, Castner Range

LDC Report Date: March 29, 2017

Parameters: Metals

Validation Level: Level IV

Laboratory: ALS Environmental

Sample Delivery Group (SDG): K1700776

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
FTBL-IS-185-012517	K1700776-004	Soil	01/25/17
FTBL-IS-157-012517	K1700776-005	Soil	01/25/17

Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Final Quality Assurance Project Plan, Military Munitions Response Program Remedial Investigation, Closed Castner Firing Range, Fort Bliss, El Paso, Texas (February 2015), the U.S. Department of Defense (DoD) Quality Systems Manual (QSM) for Environmental Laboratories, Version 5.0 (July 2013), and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines (CLPNFG) for Inorganic Superfund Data Review (October 2004). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Antimony, Arsenic, Beryllium, Copper, Lead, Nickel, and Zinc by Environmental Protection Agency (EPA) SW 846 Method 6020A

All sample results were subjected to Level IV evaluation, which is comprised of the quality control (QC) summary forms as well as the raw data, to confirm sample quantitation and identification.

The following are definitions of the data qualifiers:

J (Estimated): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated due to non-conformances discovered during data validation.

U (Non-detected): The compound or analyte was analyzed for and positively identified by the laboratory; however the analyte should be considered non-detect at the reported concentration due to the presence of contaminants detected in the associated blank(s).

UJ (Non-detected estimated): The compound or analyte was reported as not detected by the laboratory; however the reported quantitation/detection limit is estimated due to non-conformances discovered during data validation.

R (Rejected): The sample results were rejected due to gross non-conformances discovered during data validation. Data qualified as rejected is not usable.

NJ (Presumptive): Presumptive evidence of presence of the compound at an estimated quantity.

NA (Not applicable): Data did not warrant qualification since detected results only are affected and the compound was not detected in the associated samples.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

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I. Sample Receipt and Technical Holding Times

All samples were received in good condition.

All technical holding time requirements were met.

II. ICPMS Tune

The mass calibration was within 0.1 AMU and the percent relative standard deviation (%RSD) was less than or equal to 5%.

III. Instrument Calibration

Initial and continuing calibrations were performed as required by the method.

The initial calibration verification (ICV) and continuing calibration verification (CCV) standards were within QC limits.

IV. ICP Interference Check Sample Analysis

The frequency of interference check sample (ICS) analysis was met. All criteria were within QC limits.

V. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks with the following exceptions:

Blank ID	Analyte	Maximum Concentration	Associated Samples
PB (prep blank)	Antimony	0.011 mg/Kg	All samples in SDG K1700776

Data qualification by the laboratory blanks was based on the maximum contaminant concentration in the laboratory blanks in the analysis of each analyte. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated laboratory blanks.

VI. Field Blanks

No field blanks were identified in this SDG.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) sample analysis was performed on an associated project sample. Percent recoveries (%R) were within QC limits. Relative percent differences (RPD) were within QC limits.

VIII. Duplicate Sample Analysis

The laboratory has indicated that there were no duplicate (DUP) analyses specified for the samples in this SDG, and therefore duplicate analyses were not performed for this SDG.

IX. Serial Dilution

Serial dilution analysis was performed on an associated project sample. Percent differences (%D) were within QC limits.

X. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

XI. Field Duplicates

No field duplicates were identified in this SDG.

XII. Internal Standards (ICP-MS)

All internal standard percent recoveries (%R) were within QC limits.

XIII. Sample Result Verification

All sample result verifications were acceptable.

XIV. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

The quality control criteria reviewed were met and are considered acceptable. Based upon the data validation all results are considered valid and usable for all purposes.

Fort Bliss, Castner Range
Metals - Data Qualification Summary - SDG K1700776

No Sample Data Qualified in this SDG

Fort Bliss, Castner Range
Metals - Laboratory Blank Data Qualification Summary - SDG K1700776

No Sample Data Qualified in this SDG

Fort Bliss, Castner Range
Metals - Field Blank Data Qualification Summary - SDG K1700776

No Sample Data Qualified in this SDG

LDC #: 38178C4a
SDG #: K1700776
Laboratory: ALS Environmental

VALIDATION COMPLETENESS WORKSHEET

~~ADR~~ IV

Date: 3/3/17
Page: 1 of 1

METHOD: Metals (EPA SW 846 Method 6020A)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A /N	Not reviewed for ADR validation.
II.	ICP/MS Tune	A	
III.	Instrument Calibration	A	
IV.	ICP Interference Check Sample (ICS) Analysis	A	
V.	Laboratory Blanks	SW	~~ICB/CCB only~~
VI.	Field Blanks	N	Not reviewed for ADR validation.
VII.	Matrix Spike/Matrix Spike Duplicates	A	Not reviewed for ADR validation. MS/D (SDG: K1700699)
VIII.	Duplicate sample analysis	N	Not reviewed for ADR validation.
IX.	Serial Dilution	A	
X.	Laboratory control samples	A	Not reviewed for ADR validation. LCS
XI.	Field Duplicates	N	Not reviewed for ADR validation.
XII.	Internal Standard (ICP-MS)	A	
XIII.	Sample Result Verification	A	Not reviewed for ADR validation.
XIV.	Overall Assessment of Data	A	Not reviewed for ADR validation.

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

** Indicates sample was underwent Level IV review

	Client ID	Lab ID	Matrix	Date
1	~~FTBL-IS-176-012517~~	~~K1700776-001~~	Soil	01/25/17
2	FTBL-IS-183-012517	K1700776-002	Soil	01/25/17
3	~~FTBL-IS-184-012517~~	K1700776-003	Soil	~~01/25/17~~ C
4	FTBL-IS-185-012517**	K1700776-004**	Soil	01/25/17
5	FTBL-IS-157-012517**	K1700776-005**	Soil	01/25/17
6	~~FTBL-IS-156-012517~~	K1700776-006	Soil	~~01/25/17~~ C
7	~~FTBL-IS-159-012517~~	K1700776-007	Soil	~~01/25/17~~ C
8				
9				
10				
11				
12				
13				

Notes:

DC #: 38178C4a

VALIDATION FINDINGS CHECKLIST

[redacted]

Method: Metals (EPA SW 846 Method 6010B/7000/6020)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. ICP/MS Tune				
Were all isotopes in the tuning solution mass resolution within 0.1 amu?	✓			
Were %RSD of isotopes in the tuning solution ≤5%?	✓			
III. Calibration				
Were all instruments calibrated daily, each set-up time?	✓			
Were the proper number of standards used?	✓			
Were all initial and continuing calibration verification %Rs within the 90-110% (80-120% for mercury) QC limits?	✓			
Were all initial calibration correlation coefficients ≥ 0.995?	✓			
IV. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	✓			
V. ICP Interference Check Sample				
Were ICP interference check samples performed daily?	✓			
Were the AB solution percent recoveries (%R) with the 80-120% QC limits?	✓			
VI. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and duplicate (DUP) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD or MS/DUP. Soil / Water.	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the 75-125 QC limits? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.	✓			
Were the MS/MSD or duplicate relative percent differences (RPD) ≤ 20% for waters and ≤ 35% for soil samples? A control limit of +/- RL(+/-2X RL for soil) was used for samples that were ≤ 5X the RL, including when only one of the duplicate sample values were ≤ 5X the RL.	✓			
VII. Laboratory control samples				
Was an LCS anaylzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the 80-120% QC limits for water samples and laboratory established QC limits for soils?	✓			

[redacted]

Validation Area	Yes	No	NA	Findings/Comments
VIII. Furnace Atomic Absorption QC				
If MSA was performed, was the correlation coefficients > 0.995?			✓	
Do all applicable analysies have duplicate injections? (Level IV only)			✓	
For sample concentrations > RL, are applicable duplicate injection RSD values < 20%? (Level IV only)			✓	
Were analytical spike recoveries within the 85-115% QC limits?			✓	
IX. ICP Serial Dilution				
Was an ICP serial dilution analyzed if analyte concentrations were > 50X the MDL (ICP)/>100X the MDL(ICP/MS)?	✓			
Were all percent differences (%Ds) < 10%?	✓			
Was there evidence of negative interference? If yes, professional judgement will be used to qualify the data.			✓	
X. Internal Standards (EPA SW 846 Method 6020/EPA 200.8)				
Were all the percent recoveries (%R) within the 30-120% (6020)/60-125% (200.8) of the intensity of the internal standard in the associated initial calibration?	✓			
If the %Rs were outside the criteria, was a reanalysis performed?			✓	
XI. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
XII. Sample Result Verification				
Were RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Overall assessment of data	✓			
Overall assessment of data was found to be acceptable.				
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target analytes were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.		✓	✓	
Target analytes were detected in the field blanks.				

LDC #: 38786Ca

VALIDATION FINDINGS WORKSHEET
Sample Specific Element Reference

[redacted]

All circled elements are applicable to each sample.

Sample ID	Matrix	Target Analyte List (TAL)
1		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, (Pb), Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
2-4		Al, (Sb), As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, (Pb), Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
5-7		Al, (Sb), (As), Ba, (Be), Cd, Ca, Cr, Co, (Cu), Fe, (Pb), Mg, Mn, Hg, (Ni), K, Se, Ag, Na, Tl, V, (Zn), Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
Analysis Method		
ICP		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
ICP-MS		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
GFAA		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___

Comments: Mercury by CVAA if performed

LDC #: 38178C4a

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Page: [redacted] of

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000) Soil preparation factor applied: 100x x 5xdil
Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: All

				Sample Identification										
Analyte	**Maximum PB[a] (mg/Kg)**	**Maximum ICB/CCB[a] (ug/L)**	**Action Level**	**No qualifiers (>5x)**										
Sb	0.011		0.055											

Samples with analyte concentrations within five times the associated ICB, CCB or PB concentration are listed above with the identifications from the Validation Completeness Worksheet. These sample results were qualified as not detected, "U".
Note : a - The listed analyte concentration is the highest ICB, CCB, or PB detected in the analysis of each element.

LDC #: 38178C4

VALIDATION FINDINGS WORKSHEET
Initial and Continuing Calibration Calculation Verification

[redacted]

METHOD: Trace metals (EPA SW 846 Method 6010/6020/7000)

An initial and continuing calibration verification percent recovery (%R) was recalculated for each type of analysis using the following formula:

%R = Found x 100 / True

Where, Found = concentration (in ug/L) of each analyte measured in the analysis of the ICV or CCV solution
True = concentration (in ug/L) of each analyte in the ICV or CCV source

Standard ID	Type of Analysis	Element	Found (ug/L)	True (ug/L)	Recalculated %R	Reported %R	Acceptable (Y/N)
	ICP (Initial calibration)						
ICV	ICP/MS (Initial calibration) 09:36	Pb	25,217	25.0	101	101	Y
	CVAA (Initial calibration)						
	ICP (Continuing calibration)						
CCV2	ICP/MS (Continuing calibration) 10:43	Ni	24.6	25.0	98	98	Y
	CVAA (Continuing calibration)						

Comments:

CALCLC.4C4

LDC #: 38178C4

VALIDATION FINDINGS WORKSHEET
Level IV Recalculation Worksheet

[redacted]

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Percent recoveries (%R) for an ICP interference check sample, a laboratory control sample and a matrix spike sample were recalculated using the following formula:

$\%R = \frac{Found}{True} \times 100$

Where, Found = Concentration of each analyte measured in the analysis of the sample. For the matrix spike calculation, Found = SSR (spiked sample result) - SR (sample result).
True = Concentration of each analyte in the source.

A sample and duplicate relative percent difference (RPD) was recalculated using the following formula:

$RPD = \frac{|S-D|}{(S+D)/2} \times 100$

Where, S = Original sample concentration
D = Duplicate sample concentration

An ICP serial dilution percent difference (%D) was recalculated using the following formula:

$\%D = \frac{|I-SDR|}{I} \times 100$

Where, I = Initial Sample Result (mg/L)
SDR = Serial Dilution Result (mg/L) (Instrument Reading x 5)

Sample ID	Type of Analysis	Element	Found / S / I (units)	True / D / SDR (units)	Recalculated %R / RPD / %D	Reported %R / RPD / %D	Acceptable (Y/N)
ICSAB	ICP interference check 10:06	Zn	22.309	25.0	89	89	Y
LCS	Laboratory control sample 10:13	As	996	1000	100	100	Y
N	Matrix spike		(SSR-SR)				
N	Duplicate						
N	ICP serial dilution						

Comments: _____

LDC #: 35178C4a

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

[redacted]

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Have results been reported and calculated correctly?
Y N N/A Are results within the calibrated range of the instruments and within the linear range of the ICP?
Y N N/A Are all detection limits below the CRDL?

Detected analyte results for Sb were recalculated and verified using the following equation:

Concentration = $\frac{(RD)(FV)(Dil)}{(In.\ Vol.)}$

RD = Raw data concentration
FV = Final volume (ml)
In. Vol. = Initial volume (ml) or weight (G)
Dil = Dilution factor

Recalculation:

$4 = \frac{100mL(5)(1.927\ mg/L)}{0.991\ (1.02g)(1000)} = 0.953\ mg/kg$

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
	4	Sb	0.950	0.953	Y
	5	Ni	8.34	8.34	Y

Note: _____

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Fort Bliss, Castner Range

LDC Report Date: March 29, 2017

Parameters: Explosives

Validation Level: Level IV

Laboratory: ALS Environmental

Sample Delivery Group (SDG): K1700776

Sample Identification	Laboratory Sample Identification	Matrix	Collection Date
FTBL-IS-157-012517	K1700776-005	Soil	01/25/17

Introduction

This Data Validation Report (DVR) presents data validation findings and results for the associated samples listed on the cover page. Data validation was performed in accordance with the Final Quality Assurance Project Plan, Military Munitions Response Program Remedial Investigation, Closed Castner Firing Range, Fort Bliss, El Paso, Texas (February 2015), the U.S. Department of Defense (DoD) Quality Systems Manual (QSM) for Environmental Laboratories, Version 5.0 (July 2013), and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines (CLPNFG) for Superfund Organic Methods Data Review (October 1999). Where specific guidance was not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Explosives by Environmental Protection Agency (EPA) SW 846 Method 8330B

All sample results were subjected to Level IV data validation, which is comprised of the quality control (QC) summary forms as well as the raw data, to confirm sample quantitation and identification.

The following are definitions of the data qualifiers:

J (Estimated): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated due to non-conformances discovered during data validation.

U (Non-detected): The compound or analyte was analyzed for and positively identified by the laboratory; however the analyte should be considered non-detect at the reported concentration due to the presence of contaminants detected in the associated blank(s).

UJ (Non-detected estimated): The compound or analyte was reported as not detected by the laboratory; however the reported quantitation/detection limit is estimated due to non-conformances discovered during data validation.

R (Rejected): The sample results were rejected due to gross non-conformances discovered during data validation. Data qualified as rejected is not usable.

NJ (Presumptive): Presumptive evidence of presence of the compound at an estimated quantity.

NA (Not applicable): Data did not warrant qualification since detected results only are affected and the compound was not detected in the associated samples.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

I. Sample Receipt and Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

II. Initial Calibration and Initial Calibration Verification

An initial calibration was performed as required by the method.

The percent relative standard deviations (%RSD) were less than or equal to 15.0% for all compounds.

The percent differences (%D) of the initial calibration verification (ICV) standard were less than or equal to 20.0% for all compounds.

Retention time windows were established as required by the method.

III. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) were less than or equal to 20.0% for all compounds.

Retention times of all compounds in the calibration standards were within the established retention time windows.

IV. Laboratory Blanks

Laboratory blanks were analyzed as required by the method. No contaminants were found in the laboratory blanks with the following exceptions:

Blank ID	Extraction Date	Compound	Concentration	Associated Samples
KWG1700911-17 (grinding blank)	02/02/17	1,3-Dinitrobenzene 3-Nitrotoluene	0.082 mg/Kg 0.046 mg/Kg	All samples in SDG K1700776

Sample concentrations were compared to concentrations detected in the laboratory blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated laboratory blanks with the following exceptions:

Sample	Compound	Reported Concentration	Modified Final Concentration
FTBL-IS-157-012517	3-Nitrotoluene	0.027 mg/Kg	0.041U mg/Kg

V. Field Blanks

No field blanks were identified in this SDG.

VI. Surrogates

Surrogates were added to all samples as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples/Standard Reference Materials

Laboratory control samples (LCS) and laboratory control samples duplicates (LCSD) were analyzed as required by the method. Percent recoveries (%R) were within QC limits. Relative percent differences (RPD) were within QC limits.

Standard reference materials (SRM) were analyzed as required by the method. The results were within QC limits.

IX. Field Duplicates

No field duplicates were identified in this SDG.

X. Compound Quantitation

All compound quantitations met validation criteria with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
FTBL-IS-157-012517	3-Nitrotoluene	2nd column confirmation was not performed for this compound.	This compound must be confirmed on the 2nd column per the method.	NJ (all detects)	A

XI. Target Compound Identifications

All target compound identifications met validation criteria.

XII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Due to results not being confirmed, data were qualified as presumptive and estimated in one sample.

Due to grinding blank contamination, data were qualified as not detected in one sample.

The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable. Sample results that were found to be estimated (J) are usable for limited purposes only. Based upon the data validation all other results are considered valid and usable for all purposes.

Fort Bliss, Castner Range
Explosives - Data Qualification Summary - SDG K1700776

Sample	Compound	Flag	A or P	Reason
FTBL-IS-157-012517	3-Nitrotoluene	NJ (all detects)	A	Compound quantitation (no confirmation)

Fort Bliss, Castner Range
Explosives - Laboratory Blank Data Qualification Summary - SDG K1700776

Sample	Compound	Modified Final Concentration	A or P
FTBL-IS-157-012517	3-Nitrotoluene	0.041U mg/Kg	A

Fort Bliss, Castner Range
Explosives - Field Blank Data Qualification Summary - SDG K1700776

No Sample Data Qualified in this SDG

LDC #: 38178C40
SDG #: K1700776
Laboratory: ALS Environmental

VALIDATION COMPLETENESS WORKSHEET
ADR/IV

Date: 3/6/17
Page: 1 of 1

[redacted]

METHOD: HPLC Explosives (EPA SW 846 Method 8330B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A	
II.	Initial calibration/ICV	A A	RSD ≤ 15%. ICV ≤ 20%
III.	Continuing calibration	A	CCV ≤ 20%
IV.	Laboratory Blanks	SW	Not reviewed for ADR validation. grinding Blc
V.	Field blanks	N	
VI.	Surrogate spikes	A	Not reviewed for ADR validation.
VII.	Matrix spike/Matrix spike duplicates	N	Not reviewed for ADR validation. CS
VIII.	Laboratory control samples	A	Not reviewed for ADR validation. LCS. SRM.
IX.	Field duplicates	N	
X.	Compound quantitation RL/LOQ/LODs	SW	Not reviewed for ADR validation.
XI.	Target compound identification	A	Not reviewed for ADR validation.
XII.	Overall assessment of data	A	Not reviewed for ADR validation.

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

** Indicates sample was underwent Level IV review

	Client ID	Lab ID	Matrix	Date
1	~~FTBL-IS-176-012517~~	~~K1700776-001~~	~~Soil~~	~~01/25/17~~
2	FTBL-IS-183-012517	K1700776-002	Soil	01/25/17
3	FTBL-IS-184-012517	K1700776-003	Soil	01/25/17
4	~~FTBL-IS-185-012517**~~	~~K1700776-004**~~	~~Soil~~	~~01/25/17~~
5	FTBL-IS-157-012517**	K1700776-005**	Soil	01/25/17
6	~~FTBL-IS-156-012517~~	~~K1700776-006~~	~~Soil~~	~~01/25/17~~
7	~~FTBL-IS-159-012517~~	~~K1700776-007~~	Soil	01/25/17
8				
9				
10				
11				

Notes:

LDC #: 38178A0

VALIDATION FINDINGS CHECKLIST

[redacted]

Method: GC ✓ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	✓			
Was cooler temperature criteria met?	✓			
IIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 15%?	✓			
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit acceptance criteria of ≥0.990?			✓	
Were the RT windows properly established?	✓			
IIb. Initial calibration verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?	✓			
Were all percent differences (%D) ≤ 20% or percent recoveries (%R) 80-120%?	✓			
III. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20% or percent recoveries (%R) 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
IV. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	✓			
Was a laboratory blank analyzed for each matrix and concentration?	✓			
Was there contamination in the laboratory blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
V. Field Blanks				
Were field blanks identified in this SDG?		✓		
Were target compounds detected in the field blanks?			✓	
VI. Surrogate spikes				
Were all surrogate percent recovery (%R) within the QC limits?	✓			
If the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix Spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.		✓		
Was a MS/MSD analyzed every 20 samples of each matrix?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	

[redacted]

Validation Area	Yes	No	NA	Findings/Comments
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Field duplicates				
Were field duplicate pairs identified in this SDG?		✓		
Were target compounds detected in the field duplicates?			✓	
X. Compound quantitation				
Were compound quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XI. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			

VALIDATION FINDINGS WORKSHEET

METHOD: ____GC ____HPLC

8310	8330	8151	8141	8141(Con't)	8021B
A. Acenaphthene	A. HMX	A. 2,4-D	A. Dichlorvos	V. Fensulfothion	V. Benzene
B. Acenaphthylene	B. RDX	B. 2,4-DB	B. Mevinphos	W. Bolstar	CC. Toluene
C. Anthracene	C. 1,3,5-Trinitrobenzene	C. 2,4,5-T	C. Demeton-O	X. EPN	EE. Ethylbenzene
D. Benzo(a)anthracene	D. 1,3-Dinitrobenzene	D. 2,4,5-TP	D. Demeton-S	Y. Azinphos-methyl	SSS. o-Xylene
E. Benzo(a)pyrene	E. Tetryl	E. Dinoseb	E. Ethoprop	Z. Coumaphos	RRR. m,p-Xylenes
F. Benzo(b)fluoranthene	F. Nitrobenzene	F. Dichlorprop	F. Naled	AA. Parathion	GG. Total xylenes
G. Benzo(g,h,i)perylene	G. 2.4.6-Trinitrotoluene	G. Dicamba	G. Sulfotepp	BB. Famphur	
H. Benzo(k)fluoranthene	H. 4-Amino-2,6-dinitrotoluene	H. Dalapon	H. Phorate	CC. Phosmet	
I. Chrysene	I. 2-Amino-4,6-dinitrotoluene	I. MCPP	I. Dimethoate	DD. Trifluralin	
J. Dibenz(a,h)anthracene	J. 2,4-Dinitrotolune	J. MCPA	J. Diazinon	EE. Def	
K. Fluoranthene	K. 2,6-Dinitrotoluene	K. Pentachlorophenol	K. Disulfoton	FF. Prowl	Krone
L. Fluorene	L. 2-Nitrotoluene	L.. 2,4,5-TP (silvex)	L. Parathion-methyl	GG. Ethion	A. Tetra-n-butyltin
M. Indeno(1,2,3-cd)pyrene	M. 3-Nitrotoluene	M. Silvex	M. Ronnel	HH. Tetrachlorvinphos	B. Tri-n-butyltin Cation
N. Naphthalene	N. 4-Nitrotoluene		N. Malathion	II. Sulprofos	C. Di-n-butyltin Cation
O. Phenanthrene	O.		O. Chlorpyrifos		D. N-Butyltin Cation
P. Pyrene	P.		P. Fenthion		
Q.	Q.		Q. Parathion-ethyl		
R.	R.		R. Trichloronate		
S.			S. Merphos		
			T. Stirophos		
			U. Tokuthion		

Notes:_____

LDC #: 38178C40

VALIDATION FINDINGS WORKSHEET
Blanks

Page: 1 of 1

[redacted]

METHOD: __ GC/HPAC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Were all samples associated with a given method blank?

(Y) N N/A Was a method blank performed for each matrix and whenever a sample extraction procedure was performed?

(Y) N N/A Was a method blank performed with each extraction batch?

(Y) N N/A Were any contaminants found in the method blanks? If yes, please see findings below.

Blank extraction date: 3/7/17 **Blank analysis date:** 3/10/17

Conc. units: MS/KG **Associated samples:** all

Compound	Blank ID	Sample Identification								
Flinders Storage Bx HWF	IT00911-17		5							
D	0.082									
M	0.046		0.027 / 0.041 U							

Blank extraction date:_____ **Blank analysis date:**_____ **Associated samples:**_____

Conc. units:_____

Compound	Blank ID	Sample Identification								

ALL CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
All contaminants within five times the method blank concentration were qualified as not detected, "U".

LDC #: 38178C40

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

[redacted]

METHOD: __ GC _✓_ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Level IV/D Only

Y N N/A Were CRQLs adjusted for sample dilutions, dry weight factors, etc.?

Y N N/A Did the reported results for detected target compounds agree within 10.0% of the recalculated results?

Y N N/A Did the relative percent differences of detected compounds between two columns/detectors ≤40%?

If no, please see findings bellow.

#	Compound Name	Sample ID	%RPD Between Two Columns/Detectors Limit (≤ 40%)	Qualifications
	3-Nitrotoluene	5	No confirmation	NJ detects / A

Comments: See sample calculation verification worksheet for recalculations

LDC #: 38178C40

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

[redacted]

METHOD: GC_____HPLC ✓

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (1000 std)	Recalculated CF (1000 std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	12/9/16	HMX	11900	11950	12000	~~11940~~ 11950	1.7	1.8
			3-Nitrotoluene	20300	20277	20100	20140	1.8	1.9
2	ICAL	12/7/16	Nitroglycerin	21500	21518	20800	20838	7.2	7.3
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 38178c40

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

[redacted]

METHOD: GC_____HPLC ✓

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	020T000103	2/7/17	Nitroglycerin	20800	20900	20927	0	0.6
			HMX	12000	11600	11609	3	3.2
			3-Nitrotoluene	20100	19100	19115	5	4.9
2	020T00011T	2/8/17	↓	20800	21200	21197	2	1.9
				12000	11600	11633	3	3.1
				20100	19400	19377	4	3.6
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 38178C40

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

[redacted]

METHOD: __ GC __✓ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: 5

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
1-Chloro-3-nitrobenzene		5000	4539	91	91	0

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: 38IT8C40

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

[redacted]

METHOD: ___ GC _/_ HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA

RPD = I SSCLCS - SSCLCSD I * 2/(SSCLCS + SSCLCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: KWG1700911-5

Compound	Spike Added (MS/kg)		Spiked Sample Concentration (MS/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)	1.98	NA	1.64	NA	83	83				
2,4,6-Trinitrotoluene (8330)	✓	✓	1.67	✓	84	84				

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 38178c40

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

[redacted]

METHOD: __ GC / HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound In the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID. 5 Compound Name 3-Nitrotoluene

Concentration = $\frac{(16700012)(8)(1)}{(20100)(10.0328)(0.985)(1000)}$

$= 0.027$ MS/FS

#	Sample ID	Compound	Reported Concentrations (MS/FS)	Recalculated Results Concentrations ( )	Qualifications
	5	5	0.027		

Comments: _____

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March 02, 2017

Analytical Report for Service Request No: K1700916

ARCADIS U.S., Inc.
401 East Main Street
Suite 400
El Paso, TX 79901

Castner Firing Range / 06261038.0001.00400

Enclosed are the results of the sample(s) submitted to our laboratory January 31, 2017
For your reference, these analyses have been assigned our service request number **K1700916.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is ____ You may also contact me via

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

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Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEC UST	http://dec.alaska.gov/applications/eh/ehllabreports/USTLabs.aspx	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L14-51
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	Not available	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/portal/DIVISIONS/PublicParticipationandPermitSupport/LouisianaLaboratoryAccreditationProgram.aspx	03016
Maine DHS	Not available	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Montana DPHHS	http://www.dphhs.mt.gov/publichealth/	CERT0047
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/oqa/	WA005
North Carolina DWQ	http://www.dwqlab.org/	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/envserv/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	http://www.epa.gov/region8/water/dwhome/wyomingdi.html	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.
Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

TRRP

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Appendix A ALS Kelso-Laboratory Data Package Signature Page

This data package consists of:

☒ This signature page, the laboratory review checklist, and the following reportable data:

☒ R1 Field chain-of-custody documentation;

☒ R2 Sample identification cross-reference;

☒ R3 Test reports (analytical data sheets) for each environmental sample that includes:

a) Items consistent with NELAC 5.13 or ISO/IEC 17025 Section 5.10
b) dilution factors,
c) preparation methods,
d) cleanup methods, and
e) if required for the project, tentatively identified compounds (TICs).

☒ R4 Surrogate recovery data including:

a) Calculated recovery (%R), and
b) The laboratory's surrogate QC limits.

☒ R5 Test reports/summary forms for blank samples;

☒ R6 Test reports/summary forms for laboratory control samples (LCSs) including:

a) LCS spiking amounts,
b) Calculated %R for each analyte, and
c) The laboratory's LCS QC limits.

☒ R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:

a) Samples associated with the MS/MSD clearly identified,
b) MS/MSD spiking amounts,
c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
d) Calculated %Rs and relative percent differences (RPDs), and
e) The laboratory's MS/MSD QC limits

☒ R8 Laboratory analytical duplicate (if applicable) recovery and precision:

a) the amount of analyte measured in the duplicate,
b) the calculated RPD, and
c) the laboratory's QC limits for analytical duplicates.

☒ R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix;

☒ R10 Other problems or anomalies.

☒ The Exception Report for every "No" or "Not Reviewed (NR)" item in laboratory review checklist.

Release Statement: I am responsible for the release of this laboratory data package. This data package has been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. By me signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

Check, if applicable: [ ] –This laboratory is an in-house laboratory controlled by the person responding to rule. The official signing the cover page of the rule-required report (for example, the APAR) in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Laboratory Review Checklist: Reportable Data								
Laboratory Name: ALS Laboratory Group			LRC Date: 3/2/2017					
Project Name: Closed Castner Firing Range			Laboratory Job Number: K1700916					
Reviewer Name: (b) (6)			Prep Batch Number(s): Various					
#[1]	**A[2]**	**Description**	**Yes**	**No**	**NA[3]**	**NR[4]**	**ER#[5]**
R1	I	**Chain-of-custody (C-O-C)**					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?	X				
R2	I	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	I	**Test reports**					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW-846 Method 5035?			X		
		If required for the project, TICs reported?			X		
R4	I	**Surrogate recovery data**					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	I	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	I	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	I	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		X1			
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	I	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	I	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	I	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Were all necessary corrective actions performed for the reported data?	X				
		Was applicable and available technology used to lower the SDL and minimize the matrix interference affects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Program for the analytes, matrices and methods associated with this laboratory data package?	X				

Laboratory Review Checklist: Reportable Data							
Laboratory Name: ALS Laboratory Group			LRC Date: 3/2/2017				
Project Name: Closed Castner Firing Range			Laboratory Job Number: K1700916				
Reviewer Name: (b) (6)			Prep Batch Number(s): Various				
#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	I	**Initial calibration (ICAL)**					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	I	**Initial and continuing calibration verification (ICCV and CCV) and continuing calibration blank (CCB)**					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	**Mass spectral tuning:**					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S4	O	**Internal standards (IS):**					
		Were IS area counts and retention times within the method-required QC limits?			X		
S5	I	**Raw data** (NELAC section 1 appendix A glossary, and section 5.12 or ISO/IEC 17025 section					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	**Dual column confirmation**					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	**Tentatively identified compounds (TICs):**					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	**Interference Check Sample (ICS) results:**					
		Were percent recoveries within method QC limits?	X				
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X				
S10	I	**Method detection limit (MDL) studies**					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	I	**Proficiency test reports:**					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	I	**Standards documentation**					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	I	**Compound/analyte identification procedures**					
		Are the procedures for compound/analyte identification documented?	X				
S14	I	**Demonstration of analyst competency (DOC)**					
		Was DOC conducted consistent with NELAC Chapter 5C or ISO/IEC 4?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	I	**Verification/validation documentation for methods** (NELAC Chap 5 or ISO/IEC 17025 Section 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	I	**Laboratory standard operating procedures (SOPs):**					
		Are laboratory SOPs current and on file for each method performed?	X				

Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
O = Organic Analyses; I = Inorganic Analyses (and general chemistry, when applicable);
NA = Not Applicable;
NR = Not Reviewed;
R# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Reportable Data	
Laboratory Name: ALS Laboratory Group	LRC Date: 3/2/2017
Project Name: Closed Castner Firing Range	Laboratory Job Number: K1700916
Reviewer Name: (b) (6)	Prep Batch Number(s): Various

ER#[5]	Description
X1	See Total Metals Matrix Spike Recovery Exceptions notes

Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
O = Organic Analyses; I = Inorganic Analyses (and general chemistry, when applicable);
NA = Not Applicable;
NR = Not Reviewed;
R# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Case Narrative

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

ALS ENVIRONMENTAL

Client:	ARCADIS U.S., Inc.	**Service Request No.:**	K1700916
Project:	Closed Castner Firing Range/ 06261038.0001.00400	**Date Received:**	01/31/17
Sample Matrix:	Soil		

Case Narrative

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier IV validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Three soil samples were received for analysis at ALS Environmental on 01/31/17. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4ºC upon receipt at the laboratory.

Total Metals

Matrix Spike Recovery Exceptions:
Antimony recoveries are generally low for soil and sediment samples when digested using EPA Method 3050B. Despite anticipated low recoveries, the method is still generally prescribed because of its versatility for general metals analysis. Antimony results (in conjunction with the matrix spike recovery) from this procedure should only be used as indicators to estimate concentrations. The matrix spike and matrix spike duplicate recoveries of Antimony for sample FTBL-SED-076-0-6-012817 was below the ALS control criterion. Since low recoveries resulted from a method defect and were possibly magnified by certain matrix components, no corrective action was appropriate. Alternative procedures that specifically target Antimony are available but were not specified for this project. The associated QA/QC results (e.g. control sample, calibration standards, etc.) indicated the analysis was in control.

No other anomalies associated with the analysis of these samples were observed.

Chain of Custody

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
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Chain of Custody

ADDRESS 1317 South 13th Ave., Kelso, WA 98626
PHONE 1 360 577 7222 FAX 1 360 636 1068
Columbia Analytical Services, Inc.
[redacted] Group A Campbell Brothers Limited Company

Work Order No.: K1700916

Project Manage [redacted]		**Bill to:**	PO Number: 06261038.0001.00400
Client Name:	Arcadis	**Company:**	Arcadis
Address:	401 East Main Street, Suite 400	**Address:**	630 Plaza Drive
City, State ZIP:	El Paso, Texas 79901	**City, State ZIP:**	Highlands Ranch, Co 80129
[redacted] **Phone:**	915-433-1761	**Email:**	accountspayable.administration@arcadis.com
Project Name:	Closed Castner Firing Range		
Project Number:	06261038.0001.00400		
[redacted]			

SAMPLE RECEIPT

Temperature (°C):		Temp Blank Present		
Received Intact:	Yes	No	N/A	Wet Ice / Blue Ice
Cooler Custody Seals:	Yes	No	N/A	Total Containers:
Sample Custody Seals:	Yes	No	N/A	

REQUESTED ANALYSIS

TAT

Standard
Same Day ***
Next Day ***
5 Day
EDD

*** Please call fo availability

Due Date:

Sample Identification	Matrix	Date Sampled	Time Sampled	Lab ID	No. of Containers	Zinc	Arsenic	Total Metals (As, Be, Cu, Ni, Pb, Sb, Zn)	Comments
FTBL-SED-076-0-6-012817	S	1/28/17	0815		1			X	Hold
FTBL-SED-075-0-6-012817	S	1/28/17	0830		1			X	Hold
FTBL-SED-074-0-6-012817	S	1/28/17	0845		1			X	Hold
FTBL-SED-	[redacted]				1				
FTBL-SED-					1				
FTBL-SED-					1				
FTBL-SED-					1				
FTBL-SED-					1				
FTBL-SED-					1				
FTBL-SED-					1				
FTBL-SED-					1				

Dissolved	Co, Cr, Cu, Fe, K, Li, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Se, Si, Sn, Sr, Tl, V, Zn, Zr
Total	Ag, Al, As, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, K, Li, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Se, Si, Sn, Sr, Tl, V, Zn, Zr

Additional Methods Available Upon Request

RELINQUISHED BY

[redacted]

Date/Time
1/31/17 1020

[redacted]

Cooler Receipt and Preservation Form

Client Arcadis Service Request *K17* 00916

Received: 1/31/17 Opened: 1/31/17 By: [illegible] Unloaded: 1/31/17 By: [illegible]

1. Samples were received via? *USPS* (*Fed Ex*) *UPS* *DHL* *PDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) (*Cooler*) *Box* *Envelope* *Other* _____ *NA*
3. Were custody seals on coolers? NA (Y) N If yes, how many and where? one, front
   If present, were custody seals intact? (Y) N If present, were they signed and dated? (Y) N

Raw Cooler Temp	Corrected Cooler Temp	Raw Temp Blank	Corrected Temp Blank	Corr. Factor	Thermometer ID	Cooler/COC ID (NA)	Tracking Number NA	Filed
-0.9	-0.6	1.4	1.3	-0.1	325		785456768939	

4. Packing material: *Inserts* (*Baggies*) *Bubble Wrap* *Gel Packs* (*Wet Ice*) *Dry Ice* *Sleeves* _____
5. Were custody papers properly filled out (ink, signed, etc.)? NA (Y) N
6. Were samples received in good condition (temperature, unbroken)? *Indicate in the table below.* NA (Y) N
   If applicable, tissue samples were received: *Frozen* *Partially Thawed* *Thawed*
7. Were all sample labels complete (i.e analysis, preservation, etc.)? NA (Y) N
8. Did all sample labels and tags agree with custody papers? *Indicate major discrepancies in the table on page 2.* NA (Y) N
9. Were appropriate bottles/containers and volumes received for the tests indicated? NA (Y) N
10. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* (NA) Y N
11. Were VOA vials received without headspace? *Indicate in the table below.* (NA) Y N
12. Was C12/Res negative? (NA) Y N

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Out of Temp	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, & Resolutions: _____

Total Solids

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Analytical Report

Client:	ARCADIS U.S., Inc.	**Service Request:**	K1700916
Project:	Closed Castner Firing Range/06261038.0001.00400	**Date Collected:**	01/28/17
Sample Matrix:	Soil	**Date Received:**	01/31/17
Analysis Method:	160.3 Modified	**Units:**	Percent
Prep Method:	None	**Basis:**	As Received

Solids, Total

Sample Name	Lab Code	Result	MRL	MDL	Dil.	Date Analyzed	Q
FTBL-SED-076-0-6-012817	K1700916-001	**94.7**	-	-	1	02/07/17 15:31	
FTBL-SED-075-0-6-012817	K1700916-002	**96.1**	-	-	1	02/07/17 15:31	
FTBL-SED-074-0-6-012817	K1700916-003	**95.3**	-	-	1	02/07/17 15:31	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	ARCADIS U.S., Inc.	**Service Request:**	K1700916
Project	Closed Castner Firing Range/06261038.0001.00400	**Date Collected:**	01/28/17
Sample Matrix:	Soil	**Date Received:**	01/31/17
Analysis Method:	160.3 Modified	**Units:**	Percent
Prep Method:	None	**Basis:**	As Received

Replicate Sample Summary
Inorganic Parameters

Sample Name:	Lab Code:	MRL	Sample Result	Duplicate Result	Average	RPD	RPD Limit	Date Analyzed
FTBL-SED-076-0-6-012817	K1700916-001DUP	-	94.7	94.7	94.7	<1	20	02/07/17

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Printed 2/8/2017 9:12:20 AM Superset Reference:17-0000410233 rev 00

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client:	ARCADIS U.S., Inc.	**Service Request:**	K1700916
Project	Closed Castner Firing Range/06261038.0001.00400	**Date Collected:**	NA
Sample Matrix:	Biosolids Solids	**Date Received:**	NA
Analysis Method:	160.3 Modified	**Units:**	Percent
Prep Method:	None	**Basis:**	NA

Replicate Sample Summary
Inorganic Parameters

Sample Name:	Lab Code:	MRL	Sample Result	Duplicate Result	Average	RPD	RPD Limit	Date Analyzed
Batch QC	K1701148-001DUP	-	21.1	21.3	21.2	<1	20	02/07/17

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Analytical Report

Client:	ARCADIS U.S., Inc.	**Service Request:**	K1700916
Project:	Closed Castner Firing Range/06261038.0001.00400	**Date Collected:**	01/28/17 08:15
Sample Matrix:	Soil	**Date Received:**	01/31/17 10:00
Sample Name:	FTBL-SED-076-0-6-012817	**Basis:**	Dry
Lab Code:	K1700916-001		

Total Metals

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Antimony	6020A	**0.058**	mg/Kg	0.052	0.026	0.010	5	02/22/17 09:14	02/16/17	
Arsenic	6020A	**4.34**	mg/Kg	0.52	0.13	0.04	5	02/21/17 13:03	02/16/17	
Beryllium	6020A	**1.84**	mg/Kg	0.021	0.021	0.005	5	02/21/17 13:03	02/16/17	
Copper	6020A	**4.70**	mg/Kg	0.10	0.10	0.04	5	02/21/17 13:03	02/16/17	
Lead	6020A	**7.73**	mg/Kg	0.052	0.052	0.021	5	02/21/17 13:03	02/16/17	
Nickel	6020A	**4.12**	mg/Kg	0.21	0.10	0.03	5	02/21/17 13:03	02/16/17	
Zinc	6020A	**33.0**	mg/Kg	0.52	0.52	0.21	5	02/21/17 13:03	02/16/17	

Analytical Report

Client:	ARCADIS U.S., Inc.	**Service Request:**	K1700916
Project:	Closed Castner Firing Range/06261038.0001.00400	**Date Collected:**	01/28/17 08:30
Sample Matrix:	Soil	**Date Received:**	01/31/17 10:00
Sample Name:	FTBL-SED-075-0-6-012817	**Basis:**	Dry
Lab Code:	K1700916-002		

Total Metals

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Antimony	6020A	**0.040 J**	mg/Kg	0.050	0.025	0.010	5	02/22/17 09:28	02/16/17	
Arsenic	6020A	**3.38**	mg/Kg	0.50	0.12	0.04	5	02/21/17 13:21	02/16/17	
Beryllium	6020A	**1.24**	mg/Kg	0.020	0.020	0.005	5	02/21/17 13:21	02/16/17	
Copper	6020A	**2.79**	mg/Kg	0.099	0.099	0.040	5	02/21/17 13:21	02/16/17	
Lead	6020A	**7.02**	mg/Kg	0.050	0.050	0.020	5	02/21/17 13:21	02/16/17	
Nickel	6020A	**2.39**	mg/Kg	0.20	0.10	0.03	5	02/21/17 13:21	02/16/17	
Zinc	6020A	**40.4**	mg/Kg	0.50	0.50	0.20	5	02/21/17 13:21	02/16/17	

Analytical Report

Client:	ARCADIS U.S., Inc.	**Service Request:**	K1700916
Project:	Closed Castner Firing Range/06261038.0001.00400	**Date Collected:**	01/28/17 08:45
Sample Matrix:	Soil	**Date Received:**	01/31/17 10:00
Sample Name:	FTBL-SED-074-0-6-012817	**Basis:**	Dry
Lab Code:	K1700916-003		

Total Metals

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Antimony	6020A	**0.082**	mg/Kg	0.051	0.026	0.010	5	02/22/17 09:41	02/16/17	
Arsenic	6020A	**4.33**	mg/Kg	0.51	0.13	0.04	5	02/21/17 13:24	02/16/17	
Beryllium	6020A	**1.45**	mg/Kg	0.021	0.021	0.005	5	02/21/17 13:24	02/16/17	
Copper	6020A	**5.39**	mg/Kg	0.10	0.10	0.04	5	02/21/17 13:24	02/16/17	
Lead	6020A	**22.5**	mg/Kg	0.051	0.051	0.021	5	02/21/17 13:24	02/16/17	
Nickel	6020A	**5.14**	mg/Kg	0.21	0.10	0.03	5	02/21/17 13:24	02/16/17	
Zinc	6020A	**64.7**	mg/Kg	0.51	0.51	0.21	5	02/21/17 13:24	02/16/17	

Analytical Report

Client:	ARCADIS U.S., Inc.	**Service Request:**	K1700916
Project:	Closed Castner Firing Range/06261038.0001.00400	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	Dry
Lab Code:	KQ1701710-01		

Total Metals

Analyte Name	Analysis Method	Result	Units	LOQ	LOD	MDL	Dil.	Date Analyzed	Date Extracted	Q
Antimony	6020A	ND U	mg/Kg	0.05	0.025	0.010	5	02/22/17 09:08	02/16/17	
Arsenic	6020A	ND U	mg/Kg	0.5	0.13	0.04	5	02/21/17 12:56	02/16/17	
Beryllium	6020A	**0.007 J**	mg/Kg	0.020	0.020	0.005	5	02/21/17 12:56	02/16/17	
Copper	6020A	**0.09 J**	mg/Kg	0.10	0.10	0.04	5	02/21/17 12:56	02/16/17	
Lead	6020A	ND U	mg/Kg	0.05	0.050	0.020	5	02/21/17 12:56	02/16/17	
Nickel	6020A	**0.03 J**	mg/Kg	0.20	0.10	0.03	5	02/21/17 12:56	02/16/17	
Zinc	6020A	**0.22 J**	mg/Kg	0.5	0.50	0.20	5	02/21/17 12:56	02/16/17	

Client:	ARCADIS U.S., Inc.	**Service Request:**	K1700916
Project:	Closed Castner Firing Range/06261038.0001.00400	**Date Collected:**	01/28/17
Sample Matrix:	Soil	**Date Received:**	01/31/17
		Date Analyzed:	02/21/17 - 02/22/17
		Date Extracted:	02/16/17

Duplicate Matrix Spike Summary
Total Metals

Sample Name:	FTBL-SED-076-0-6-012817	**Units:**	mg/Kg
Lab Code:	K1700916-001	**Basis:**	Dry
Analysis Method:	6020A		
Prep Method:	EPA 3050B		

		Matrix Spike KQ1701710-03			Duplicate Matrix Spike KQ1701710-04					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Antimony	0.058	62.5	105	59 N	63.4	103	62 N	72-124	1	20
Arsenic	4.34	112	105	102	109	103	101	82-118	3	20
Beryllium	1.84	12.6	10.5	102	12.1	10.3	100	80-120	4	20
Copper	4.70	55.7	52.7	97	54.4	51.3	97	84-119	2	20
Lead	7.73	114	105	101	115	103	105	84-118	1	20
Nickel	4.12	109	105	99	107	103	100	84-119	2	20
Zinc	32.9	128	105	90	126	103	91	82-119	1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Printed 2/23/2017 11:51:01 AM Superset Reference:

Client: ARCADIS U.S., Inc.
Project: Closed Castner Firing Range/06261038.0001.00400
Sample Matrix: Soil

Service Request: K1700916
Date Analyzed: 02/21/17 - 02/22/17

Lab Control Sample Summary
Total Metals

Units:mg/Kg
Basis: Dry

Lab Control Sample
KQ1701710-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Antimony	6020A	91.7	100	92	72-124
Arsenic	6020A	104	100	104	82-118
Beryllium	6020A	9.97	10.0	100	80-120
Copper	6020A	50.7	50.0	101	84-119
Lead	6020A	101	100	101	84-118
Nickel	6020A	101	100	101	84-119
Zinc	6020A	91.4	100	91	82-119

Prep Summary Report

Client: ARCADIS U.S., Inc. **Service Request:**K1700916
Project: Closed Castner Firing Range/06261038.0001.00400
Sample Matrix: Soil

Metals

Prep Method: EPA 3050B **Extraction Lot:**281771
Analytical Method: 6020A

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Amount	Percent Solids
FTBL-SED-076-0-6-012817	K1700916-001	1/28/17	1/31/17	1.021 g	100 mL	
FTBL-SED-075-0-6-012817	K1700916-002	1/28/17	1/31/17	1.051 g	100 mL	
FTBL-SED-074-0-6-012817	K1700916-003	1/28/17	1/31/17	1.023 g	100 mL	
Method Blank	KQ1701710-01MB	NA	NA	1.00 g	100 mL	
Lab Control Sample	KQ1701710-02LCS	NA	NA	1.00 g	100 mL	
Matrix Spike	KQ1701710-03MS	1/28/17	1/31/17	1.003 g	100 mL	
Duplicate Matrix Spike	KQ1701710-04DMS	1/28/17	1/31/17	1.028 g	100 mL	

Client: ARCADIS U.S., Inc. **Service Request:** K1700916

Project: Closed Castner Firing Range/06261038.0001.00400

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Concentration Units: ug/L

Analyte	Method	Analysis Batch	Initial Calibration			Continuing Calibration			Continuing Calibration		
			True	Found	%R (1)	True	Found	%R (1)	True	Found	%R (1)
Antimony	6020A	535579	25.0	25.1	101	25.0	25.2	101	25.0	24.8	99
Arsenic	6020A	535376	25.0	26.0	104	25.0	25.5	102	125	126	101
Beryllium	6020A	535376	2.50	2.53	101	25.0	24.9	100	125	124	100
Copper	6020A	535376	12.5	12.7	102	25.0	24.9	99	125	125	100
Lead	6020A	535376	25.0	25.4	102	25.0	25.1	100	125	124	99
Nickel	6020A	535376	25.0	25.4	101	25.0	24.6	98	125	123	98
Zinc	6020A	535376	25.0	23.0	92	25.0	24.8	99	125	125	100

Client: ARCADIS U.S., Inc. **Service Request:** K1700916

Project: Closed Castner Firing Range/06261038.0001.00400

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Concentration Units: ug/L

Analyte	Method	Analysis Batch	Initial Calibration			Continuing Calibration			Continuing Calibration		
			True	Found	%R (1)	True	Found	%R (1)	True	Found	%R (1)
Antimony	6020A	535579				25.0	25.0	100			

Client: ARCADIS U.S., Inc. **Service Request:** K1700916

Project: Closed Castner Firing Range/06261038.0001.00400

INITIAL AND CONTINUING CALIBRATION BLANK

Concentration Units: ug/L

Analyte	Method	Analysis Batch	Initial Calibration Blank		Continuing Calibration Blank		Continuing Calibration Blank		Continuing Calibration Blank	
			Result	C	Result	C	Result	C	Result	C
Antimony	6020A	535579	0.02	J	0.02	U	0.02	J	0.02	J
Arsenic	6020A	535376	0.08	U	0.08	U	0.08	U		
Beryllium	6020A	535376	0.010	U	0.010	U	0.010	U		
Copper	6020A	535376	0.08	U	0.08	U	0.08	U		
Lead	6020A	535376	0.04	U	0.04	U	0.04	U		
Nickel	6020A	535376	0.06	U	0.06	U	0.06	U		
Zinc	6020A	535376	0.4	U	0.4	U	0.4	U		

Client: ARCADIS U.S., Inc. **Service Request:** K1700916

Project: Closed Castner Firing Range/06261038.0001.00400

LOW LEVEL INITIAL AND LOW LEVEL CONTINUING CALIBRATION VERIFICATION

Concentration Units: ug/L

Sample ID / Analyte	Method	Analysis Batch:	Result	True Value	% Rec	% Rec. Limits	Analysis Date
LLICVS							
Arsenic	6020A	535376	1.1	1.0	105	80-120	02/21/17 12:37
Beryllium	6020A	535376	0.04	0.04	106	80-120	02/21/17 12:37
Copper	6020A	535376	0.2	0.2	102	80-120	02/21/17 12:37
Lead	6020A	535376	0.1	0.1	102	80-120	02/21/17 12:37
Nickel	6020A	535376	0.4	0.4	99	80-120	02/21/17 12:37
Zinc	6020A	535376	0.8	1.0	83	80-120	02/21/17 12:37
LLCCVS							
Arsenic	6020A	535376	1.1	1.0	112	70-130	02/21/17 13:45
Beryllium	6020A	535376	0.04	0.04	104	70-130	02/21/17 13:45
Copper	6020A	535376	0.2	0.2	117	70-130	02/21/17 13:45
Lead	6020A	535376	0.1	0.1	105	70-130	02/21/17 13:45
Nickel	6020A	535376	0.4	0.4	96	70-130	02/21/17 13:45
Zinc	6020A	535376	0.8	1.0	83	70-130	02/21/17 13:45
LLICVS							
Antimony	6020A	535579	0.1	0.1	96	80-120	02/22/17 08:50
LLCCVS							
Antimony	6020A	535579	0.1	0.1	109	70-130	02/22/17 09:50

Client: ARCADIS U.S., Inc. **Service Request:** K1700916

Project: Closed Castner Firing Range/06261038.0001.00400

ICP INTERFERENCE CHECK SAMPLE

Sample ID ICSA **Concentration Units:** ug/L

Analyte	Method	Analysis Batch:	Result	True Value	% Rec	% Rec. Limits	Analysis Date
Arsenic	6020A	535376	0.1	-	-	-	02/21/17 12:49
Beryllium	6020A	535376	0.060	-	-	-	02/21/17 12:49
Copper	6020A	535376	0.68	-	-	-	02/21/17 12:49
Lead	6020A	535376	0.22	-	-	-	02/21/17 12:49
Nickel	6020A	535376	0.58	-	-	-	02/21/17 12:49
Zinc	6020A	535376	0.8	-	-	-	02/21/17 12:49

Client: ARCADIS U.S., Inc. **Service Request:** K1700916

Project: Closed Castner Firing Range/06261038.0001.00400

ICP INTERFERENCE CHECK SAMPLE

Sample ID ICSAB **Concentration Units:** ug/L

Analyte	Method	Analysis Batch:	Result	True Value	% Rec	% Rec. Limits	Analysis Date
Arsenic	6020A	535376	27.8	25.0	111	80-120	02/21/17 12:53
Beryllium	6020A	535376	0.053	-	-	-	02/21/17 12:53
Copper	6020A	535376	51.3	50.0	103	80-120	02/21/17 12:53
Lead	6020A	535376	0.17	-	-	-	02/21/17 12:53
Nickel	6020A	535376	51.8	50.0	104	80-120	02/21/17 12:53
Zinc	6020A	535376	24.1	25.0	96	80-120	02/21/17 12:53

Client: ARCADIS U.S., Inc. **Service Request:** K1700916

Project: Closed Castner Firing Range/06261038.0001.00400

ICP INTERFERENCE CHECK SAMPLE

Sample ID ICSA **Concentration Units:** ug/L

Analyte	Method	Analysis Batch:	Result	True Value	% Rec	% Rec. Limits	Analysis Date
Antimony	6020A	535579	0.06	-	-	-	02/22/17 08:56

Client: ARCADIS U.S., Inc. **Service Request:** K1700916

Project: Closed Castner Firing Range/06261038.0001.00400

ICP INTERFERENCE CHECK SAMPLE

Sample ID ICSAB **Concentration Units:** ug/L

Analyte	Method	Analysis Batch:	Result	True Value	% Rec	% Rec. Limits	Analysis Date
Antimony	6020A	535579	0.07	-	-	-	02/22/17 08:59

Client: ARCADIS U.S., Inc. **Service Request:** K1700916

Project: Closed Castner Firing Range/06261038.0001.00400

POST SPIKE SAMPLE RECOVERY

Concentration Units: ug/L

Sample ID / Analyte	Method	Analysis Batch:	Initial Sample Result	Post Spike Result	True Value	% Rec	% Rec. Limits	Analysis Date
K1700916-001A								
Arsenic	6020A	535376	8.4	59.2	50.0	102	80-120	02/21/17 13:10
Beryllium	6020A	535376	3.55	54.8	50.0	103	80-120	02/21/17 13:10
Copper	6020A	535376	9.1	56.9	50.0	96	80-120	02/21/17 13:10
Lead	6020A	535376	14.9	63.9	50.0	98	80-120	02/21/17 13:10
Nickel	6020A	535376	8.0	55.1	50.0	94	80-120	02/21/17 13:10
Zinc	6020A	535376	63.8	107	50.0	85	80-120	02/21/17 13:10
K1700916-001A								
Antimony	6020A	535579	0.11	49.8	50.0	99	80-120	02/22/17 09:20

Results flagged with a pound (#) indicate the control criteria is not applicable.

Client: ARCADIS U.S., Inc. **Service Request:** K1700916

Project: Closed Castner Firing Range/06261038.0001.00400

ICP SERIAL DILUTIONS

Concentration Units: ug/L

Sample ID / Analyte	Method	Analysis Batch:	Initial Sample Result	Serial Dillution Result	% Diff	% Diff. Limit	Analysis Date
K1700916-001SDL							
Arsenic	6020A	535376	8.4	8.7	4	10	02/21/17 13:07
Beryllium	6020A	535376	3.55	3.50	1	10	02/21/17 13:07
Copper	6020A	535376	9.1	9.2	1	10	02/21/17 13:07
Lead	6020A	535376	14.9	15.4	3	10	02/21/17 13:07
Nickel	6020A	535376	8.0	8.3	4	10	02/21/17 13:07
Zinc	6020A	535376	63.8	65.5	3	10	02/21/17 13:07
K1700916-001SDL							
Antimony	6020A	535579	0.11	0.13 J	15	10	02/22/17 09:17

Client: ARCADIS U.S., Inc. **Service Request:** K1700916

Project: Closed Castner Firing Range/06261038.0001.00400

Detection Limits

Matrix: Soil

Analyte	Mass	Units	LOQ	LOD	MDL	Method
Antimony	123	ug/L	0.1	0.05	0.02	6020A
Arsenic	75	ug/L	1	0.25	0.08	6020A
Beryllium	9	ug/L	0.04	0.04	0.01	6020A
Copper	65	ug/L	0.2	0.2	0.08	6020A
Lead	208	ug/L	0.1	0.1	0.04	6020A
Nickel	60	ug/L	0.4	0.2	0.06	6020A
Zinc	66	ug/L	1	1	0.4	6020A

Client: ARCADIS U.S., Inc. **Service Request:** K1700916

Project: Closed Castner Firing Range/06261038.0001.00400

ICP Linear Range (Quarterly)

Instrument: K-ICP-MS-05

Analyte	Concentration (ug/L)	Method
Antimony 123	3000	6020A
Arsenic 75	3000	6020A
Beryllium 9	3000	6020A
Copper 65	3000	6020A
Lead 208	3000	6020A
Nickel 60	3000	6020A
Zinc 66	3000	6020A

Client: ARCADIS U.S., Inc. **Service Request:** K1700916

Project: Closed Castner Firing Range/06261038.0001.00400

Analysis Run Log

Instrument ID: **K-ICP-MS-05** **Analytical BatchID:** **535376**

Sample	Dilution Factor	Date/Time	As	Be	Cu	Pb	Ni	Zn
ZZZZZZ	1	02/21/17 12:11						
ZZZZZZ	1	02/21/17 12:15						
ICV	1	02/21/17 12:18	X	X	X	X	X	X
CCV	1	02/21/17 12:22	X	X	X	X	X	X
ICB	1	02/21/17 12:25	X	X	X	X	X	X
CCB	1	02/21/17 12:29	X	X	X	X	X	X
ZZZZZZ	1	02/21/17 12:32						
LLICVS	1	02/21/17 12:37	X	X	X	X	X	X
ZZZZZZ	1	02/21/17 12:40						
ZZZZZZ	1	02/21/17 12:45						
ICSA	1	02/21/17 12:49	X	X	X	X	X	X
ICSAB	1	02/21/17 12:53	X	X	X	X	X	X
KQ1701710-01MB	5	02/21/17 12:56	X	X	X	X	X	X
KQ1701710-02LCS	20	02/21/17 13:00	X	X	X	X	X	X
K1700916-001	5	02/21/17 13:03	X	X	X	X	X	X
K1700916-001SDL	25	02/21/17 13:07	X	X	X	X	X	X
K1700916-001PS	5	02/21/17 13:10	X	X	X	X	X	X
K1700916-001MS	5	02/21/17 13:14	X	X	X	X	X	X
K1700916-001DMS	5	02/21/17 13:17	X	X	X	X	X	X
K1700916-002	5	02/21/17 13:21	X	X	X	X	X	X
K1700916-003	5	02/21/17 13:24	X	X	X	X	X	X
ZZZZZZ	5	02/21/17 13:27						
CCV	5	02/21/17 13:31	X	X	X	X	X	X
CCB	1	02/21/17 13:34	X	X	X	X	X	X
ZZZZZZ	1	02/21/17 13:38						
ZZZZZZ	1	02/21/17 13:41						
LLCCVS	1	02/21/17 13:45	X	X	X	X	X	X
ZZZZZZ	1	02/21/17 13:48						
ZZZZZZ	1	02/21/17 13:52						
ZZZZZZ	1	02/21/17 13:55						
ZZZZZZ	1	02/21/17 13:59						
ZZZZZZ	1	02/21/17 14:02						
ZZZZZZ	5	02/21/17 14:06						
ZZZZZZ	20	02/21/17 14:09						
ZZZZZZ	5	02/21/17 14:13						
ZZZZZZ	5	02/21/17 14:16						
ZZZZZZ	5	02/21/17 14:20						

Client: ARCADIS U.S., Inc. **Service Request:** K1700916

Project: Closed Castner Firing Range/06261038.0001.00400

Analysis Run Log

Instrument ID: **K-ICP-MS-05** **Analytical BatchID:** **535376**

Sample	Dilution Factor	Date/Time	As	Be	Cu	Pb	Ni	Zn
ZZZZZZ	5	02/21/17 14:23						
ZZZZZZ	1	02/21/17 14:27						

Client: ARCADIS U.S., Inc. **Service Request:** K1700916

Project: Closed Castner Firing Range/06261038.0001.00400

Analysis Run Log

Instrument ID: **K-ICP-MS-05** **Analytical BatchID:** **535579**

Sample	Dilution Factor	Date/Time	Sb
ZZZZZZ	1	02/22/17 08:32	
ZZZZZZ	1	02/22/17 08:35	
ICV	1	02/22/17 08:38	X
CCV	1	02/22/17 08:41	X
ICB	1	02/22/17 08:44	X
CCB	1	02/22/17 08:47	X
LLICVS	1	02/22/17 08:50	X
ZZZZZZ	1	02/22/17 08:53	
ICSA	1	02/22/17 08:56	X
ICSAB	1	02/22/17 08:59	X
ZZZZZZ	1	02/22/17 09:02	
ZZZZZZ	5	02/22/17 09:05	
KQ1701710-01MB	5	02/22/17 09:08	X
KQ1701710-02LCS	20	02/22/17 09:11	X
K1700916-001	5	02/22/17 09:14	X
K1700916-001SDL	25	02/22/17 09:17	X
K1700916-001PS	5	02/22/17 09:20	X
K1700916-001MS	5	02/22/17 09:23	X
K1700916-001DMS	5	02/22/17 09:26	X
K1700916-002	5	02/22/17 09:28	X
ZZZZZZ	5	02/22/17 09:31	
CCV	1	02/22/17 09:35	X
CCB	1	02/22/17 09:38	X
K1700916-003	5	02/22/17 09:41	X
CCV	1	02/22/17 09:44	X
CCB	1	02/22/17 09:47	X
LLCCVS	1	02/22/17 09:50	X
ZZZZZZ	5	02/22/17 09:53	
ZZZZZZ	20	02/22/17 09:56	
ZZZZZZ	5	02/22/17 09:59	
ZZZZZZ	25	02/22/17 10:01	
ZZZZZZ	5	02/22/17 10:04	
ZZZZZZ	5	02/22/17 10:07	
ZZZZZZ	5	02/22/17 10:10	
ZZZZZZ	5	02/22/17 10:13	
ZZZZZZ	5	02/22/17 10:16	
ZZZZZZ	5	02/22/17 10:19	

Client: ARCADIS U.S., Inc. **Service Request:** K1700916

Project: Closed Castner Firing Range/06261038.0001.00400

Analysis Run Log

Instrument ID: **K-ICP-MS-05** **Analytical BatchID:** **535579**

Sample	Dilution Factor	Date/Time	Sb
ZZZZZZ	1	02/22/17 10:22	
ZZZZZZ	1	02/22/17 10:25	
ZZZZZZ	5	02/22/17 10:28	
ZZZZZZ	5	02/22/17 10:31	
ZZZZZZ	5	02/22/17 10:34	
ZZZZZZ	5	02/22/17 10:36	
ZZZZZZ	5	02/22/17 10:39	
ZZZZZZ	5	02/22/17 10:42	
ZZZZZZ	5	02/22/17 10:45	
ZZZZZZ	5	02/22/17 10:48	
ZZZZZZ	5	02/22/17 10:51	
ZZZZZZ	5	02/22/17 10:54	
ZZZZZZ	1	02/22/17 10:57	
ZZZZZZ	1	02/22/17 11:02	
ZZZZZZ	1	02/22/17 11:04	
ZZZZZZ	1	02/22/17 11:08	
ZZZZZZ	5	02/22/17 11:11	
ZZZZZZ	5	02/22/17 11:14	
ZZZZZZ	5	02/22/17 11:24	
ZZZZZZ	5	02/22/17 11:27	
ZZZZZZ	5	02/22/17 11:31	
ZZZZZZ	5	02/22/17 11:36	
ZZZZZZ	1	02/22/17 11:40	
ZZZZZZ	1	02/22/17 11:44	
ZZZZZZ	1	02/22/17 11:59	
ZZZZZZ	1	02/22/17 12:03	
ZZZZZZ	1	02/22/17 12:09	
ZZZZZZ	1	02/22/17 12:12	
ZZZZZZ	1	02/22/17 12:16	
ZZZZZZ	1	02/22/17 12:20	
ZZZZZZ	1	02/22/17 12:25	
ZZZZZZ	1	02/22/17 12:29	
ZZZZZZ	1	02/22/17 12:33	
ZZZZZZ	5	02/22/17 12:37	
ZZZZZZ	20	02/22/17 12:42	
ZZZZZZ	5	02/22/17 12:45	
ZZZZZZ	25	02/22/17 12:53	

Client: ARCADIS U.S., Inc. **Service Request:** K1700916

Project: Closed Castner Firing Range/06261038.0001.00400

Analysis Run Log

Instrument ID: **K-ICP-MS-05** **Analytical BatchID:** **535579**

Sample	Dilution Factor	Date/Time	Sb
ZZZZZZ	5	02/22/17 12:57	
ZZZZZZ	5	02/22/17 13:01	
ZZZZZZ	5	02/22/17 13:05	
ZZZZZZ	1	02/22/17 13:09	
ZZZZZZ	1	02/22/17 13:13	
ZZZZZZ	1	02/22/17 13:17	
ZZZZZZ	1	02/22/17 13:22	
ZZZZZZ	1	02/22/17 13:25	
ZZZZZZ	500	02/22/17 13:28	
ZZZZZZ	500	02/22/17 13:32	
ZZZZZZ	500	02/22/17 13:35	
ZZZZZZ	500	02/22/17 13:38	
ZZZZZZ	500	02/22/17 13:41	
ZZZZZZ	5000	02/22/17 13:44	
ZZZZZZ	500	02/22/17 13:47	
ZZZZZZ	500	02/22/17 13:51	
ZZZZZZ	1	02/22/17 13:54	
ZZZZZZ	1	02/22/17 13:57	
ZZZZZZ	50	02/22/17 14:00	
ZZZZZZ	50	02/22/17 14:03	
ZZZZZZ	50	02/22/17 14:07	
ZZZZZZ	1	02/22/17 14:10	
ZZZZZZ	1	02/22/17 14:13	
ZZZZZZ	1	02/22/17 14:16	
ZZZZZZ	1	02/22/17 14:19	
ZZZZZZ	1	02/22/17 14:22	
ZZZZZZ	1	02/22/17 14:26	

Client: ARCADIS U.S., Inc. **Service Request:** K1700916

Project: Closed Castner Firing Range/06261038.0001.00400

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Instrument ID: **K-ICP-MS-05** **Analytical BatchID:** **535579**

Sample	Date/Time	Ge72He	In115He	Lu175He
ZZZZZZ	02/22/17 08:32			
ZZZZZZ	02/22/17 08:35			
ICV	02/22/17 08:38	102	101	100
CCV	02/22/17 08:41	100	99	98
ICB	02/22/17 08:44	100	101	100
CCB	02/22/17 08:47	102	101	100
LLICVS	02/22/17 08:50	101	102	100
ZZZZZZ	02/22/17 08:53			
ICSA	02/22/17 08:56	96	93	97
ICSAB	02/22/17 08:59	98	93	96
ZZZZZZ	02/22/17 09:02			
ZZZZZZ	02/22/17 09:05			
KQ1701710-01MB	02/22/17 09:08	107	106	105
KQ1701710-02LCS	02/22/17 09:11	102	101	100
K1700916-001	02/22/17 09:14	112	105	103
K1700916-001SDL	02/22/17 09:17	107	103	102
K1700916-001PS	02/22/17 09:20	115	107	105
K1700916-001MS	02/22/17 09:23	110	105	103
K1700916-001DMS	02/22/17 09:26	110	105	104
K1700916-002	02/22/17 09:28	113	108	108
ZZZZZZ	02/22/17 09:31			
CCV	02/22/17 09:35	106	105	103
CCB	02/22/17 09:38	106	106	103
K1700916-003	02/22/17 09:41	114	108	105
CCV	02/22/17 09:44	107	105	105
CCB	02/22/17 09:47	106	106	103
LLCCVS	02/22/17 09:50	104	105	102
ZZZZZZ	02/22/17 09:53			
ZZZZZZ	02/22/17 09:56			
ZZZZZZ	02/22/17 09:59			
ZZZZZZ	02/22/17 10:01			
ZZZZZZ	02/22/17 10:04			
ZZZZZZ	02/22/17 10:07			
ZZZZZZ	02/22/17 10:10			
ZZZZZZ	02/22/17 10:13			
ZZZZZZ	02/22/17 10:16			
ZZZZZZ	02/22/17 10:19			

Client: ARCADIS U.S., Inc. **Service Request:** K1700916

Project: Closed Castner Firing Range/06261038.0001.00400

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Instrument ID: **K-ICP-MS-05** **Analytical BatchID:** **535579**

Sample	Date/Time	Ge72He	In115He	Lu175He
ZZZZZZ	02/22/17 10:22			
ZZZZZZ	02/22/17 10:25			
ZZZZZZ	02/22/17 10:28			
ZZZZZZ	02/22/17 10:31			
ZZZZZZ	02/22/17 10:34			
ZZZZZZ	02/22/17 10:36			
ZZZZZZ	02/22/17 10:39			
ZZZZZZ	02/22/17 10:42			
ZZZZZZ	02/22/17 10:45			
ZZZZZZ	02/22/17 10:48			
ZZZZZZ	02/22/17 10:51			
ZZZZZZ	02/22/17 10:54			
ZZZZZZ	02/22/17 10:57			
ZZZZZZ	02/22/17 11:02			
ZZZZZZ	02/22/17 11:04			
ZZZZZZ	02/22/17 11:08			
ZZZZZZ	02/22/17 11:11			
ZZZZZZ	02/22/17 11:14			
ZZZZZZ	02/22/17 11:24			
ZZZZZZ	02/22/17 11:27			
ZZZZZZ	02/22/17 11:31			
ZZZZZZ	02/22/17 11:36			
ZZZZZZ	02/22/17 11:40			
ZZZZZZ	02/22/17 11:44			
ZZZZZZ	02/22/17 11:59			
ZZZZZZ	02/22/17 12:03			
ZZZZZZ	02/22/17 12:09			
ZZZZZZ	02/22/17 12:12			
ZZZZZZ	02/22/17 12:16			
ZZZZZZ	02/22/17 12:20			
ZZZZZZ	02/22/17 12:25			
ZZZZZZ	02/22/17 12:29			
ZZZZZZ	02/22/17 12:33			
ZZZZZZ	02/22/17 12:37			
ZZZZZZ	02/22/17 12:42			
ZZZZZZ	02/22/17 12:45			
ZZZZZZ	02/22/17 12:53			

Client: ARCADIS U.S., Inc. **Service Request:** K1700916

Project: Closed Castner Firing Range/06261038.0001.00400

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Instrument ID: **K-ICP-MS-05** **Analytical BatchID:** **535579**

Sample	Date/Time	Ge72He	In115He	Lu175He
ZZZZZZ	02/22/17 12:57			
ZZZZZZ	02/22/17 13:01			
ZZZZZZ	02/22/17 13:05			
ZZZZZZ	02/22/17 13:09			
ZZZZZZ	02/22/17 13:13			
ZZZZZZ	02/22/17 13:17			
ZZZZZZ	02/22/17 13:22			
ZZZZZZ	02/22/17 13:25			
ZZZZZZ	02/22/17 13:28			
ZZZZZZ	02/22/17 13:32			
ZZZZZZ	02/22/17 13:35			
ZZZZZZ	02/22/17 13:38			
ZZZZZZ	02/22/17 13:41			
ZZZZZZ	02/22/17 13:44			
ZZZZZZ	02/22/17 13:47			
ZZZZZZ	02/22/17 13:51			
ZZZZZZ	02/22/17 13:54			
ZZZZZZ	02/22/17 13:57			
ZZZZZZ	02/22/17 14:00			
ZZZZZZ	02/22/17 14:03			
ZZZZZZ	02/22/17 14:07			
ZZZZZZ	02/22/17 14:10			
ZZZZZZ	02/22/17 14:13			
ZZZZZZ	02/22/17 14:16			
ZZZZZZ	02/22/17 14:19			
ZZZZZZ	02/22/17 14:22			
ZZZZZZ	02/22/17 14:26			

Client: ARCADIS U.S., Inc. **Service Request:** K1700916

Project: Closed Castner Firing Range/06261038.0001.00400

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Instrument ID: **K-ICP-MS-05** **Analytical BatchID:** **535376**

Sample	Date/Time	Sc45NG	Ge72He	Ge72H2	In115He	Lu175He	Li6NG
ZZZZZZ	02/21/17 12:11						
ZZZZZZ	02/21/17 12:15						
ICV	02/21/17 12:18	99	101	102	98	101	97
CCV	02/21/17 12:22	98	101	102	98	100	96
ICB	02/21/17 12:25	100	100	100	99	101	98
CCB	02/21/17 12:29	99	101	100	99	101	98
ZZZZZZ	02/21/17 12:32						
LLICVS	02/21/17 12:37	99	101	100	99	101	97
ZZZZZZ	02/21/17 12:40						
ZZZZZZ	02/21/17 12:45						
ICSA	02/21/17 12:49	93	97	97	90	96	89
ICSAB	02/21/17 12:53	94	100	99	91	97	88
KQ1701710-01MB	02/21/17 12:56	102	107	105	105	108	104
KQ1701710-02LCS	02/21/17 13:00	100	102	103	99	102	94
K1700916-001	02/21/17 13:03	103	109	104	103	105	103
K1700916-001SDL	02/21/17 13:07	102	107	105	101	102	98
K1700916-001PS	02/21/17 13:10	104	112	106	105	106	104
K1700916-001MS	02/21/17 13:14	105	108	104	103	106	102
K1700916-001DMS	02/21/17 13:17	106	109	105	104	103	103
K1700916-002	02/21/17 13:21	106	112	107	106	107	102
K1700916-003	02/21/17 13:24	108	112	108	106	107	102
ZZZZZZ	02/21/17 13:27						
CCV	02/21/17 13:31	103	107	106	103	104	102
CCB	02/21/17 13:34	103	104	103	104	104	104
ZZZZZZ	02/21/17 13:38						
ZZZZZZ	02/21/17 13:41						
LLCCVS	02/21/17 13:45	101	102	101	102	102	99
ZZZZZZ	02/21/17 13:48						
ZZZZZZ	02/21/17 13:52						
ZZZZZZ	02/21/17 13:55						
ZZZZZZ	02/21/17 13:59						
ZZZZZZ	02/21/17 14:02						
ZZZZZZ	02/21/17 14:06						
ZZZZZZ	02/21/17 14:09						
ZZZZZZ	02/21/17 14:13						
ZZZZZZ	02/21/17 14:16						
ZZZZZZ	02/21/17 14:20						

Client: ARCADIS U.S., Inc. **Service Request:** K1700916

Project: Closed Castner Firing Range/06261038.0001.00400

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Instrument ID: **K-ICP-MS-05** **Analytical BatchID:** **535376**

Sample	Date/Time	Sc45NG	Ge72He	Ge72H2	In115He	Lu175He	Li6NG
ZZZZZZ	02/21/17 14:23						
ZZZZZZ	02/21/17 14:27						

Raw Data

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Total Solids

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Benchsheet

Service Request #:	**K1700916, KQ1701254, K1701093, K1701133, K1701145, K1701148**	**Run #:**	**533804**
Test:	**TS**	**Balance ID:**	**K-BALANCE-50**
Method:	**160.3 Modified**		

Pan ID:	Lab Code:	Tare (g)	Wet Wt. (g)	Tare + Dry Wt. (g)	Dry Weight (g)	% Total Solids	RPD
	K1700916-001	1.283	10.736	11.446	10.2	94.7	
	K1700916-001DUP	1.289	11.208	11.900	10.6	94.7	<1
	K1700916-002	1.295	13.016	13.805	12.5	96.1	
	K1700916-003	1.303	10.062	10.895	9.59	95.3	
	K1701093-001	1.289	10.452	9.709	8.42	80.6	
	K1701093-002	1.291	11.960	10.823	9.53	79.7	
	K1701093-003	1.285	11.221	10.109	8.82	78.6	
	K1701093-004	1.300	10.021	9.109	7.81	77.9	
	K1701133-003	6.343	25.807	7.759	1.42	5.49	
	K1701145-001	1.292	14.244	13.849	12.6	88.2	
	K1701148-001	1.297	10.413	3.499	2.20	21.1	
	K1701148-001DUP	1.304	10.203	3.478	2.17	21.3	<1
	K1701148-002	1.297	11.372	3.994	2.70	23.7	
	K1701148-003	1.293	10.253	3.766	2.47	24.1	
	K1701148-004	1.290	10.469	4.159	2.87	27.4	
	K1701148-005	1.306	10.741	4.311	3.01	28.0	
	K1701148-006	1.280	10.898	3.717	2.44	22.4	
	K1701148-007	1.288	11.015	4.174	2.89	26.2	
	K1701148-008	1.298	11.359	3.944	2.65	23.3	

	Oven ID	Temp In	Temp Out	Date In	Time In	Date Out	Time Out	Thermometer ID
Oven1	**K-Oven-07**	**105**	**105**	**2/7/2017**	**15:31**	**2/8/2017**	**08:18**	

	Cal EQID	Cal Start Value	Cal End Value	Start Date	Start Time	End Date	End Time
Calibration1	**K-BALANCE-50**	**1.000, 99.998**	**0.998, 99.996**	**2/7/2017**	**11:08**	**2/7/2017**	**15:31**
Calibration2	**K-BALANCE-50**	**1.000, 99.999**	**1.000, 99.999**	**2/8/2017**	**08:39**	**2/8/2017**	**08:44**

Comments: DJM Weight set serial No. 42868 Reviewed by SC 2/8/17

Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Preparation Information Benchsheet

Prep Run: 281771 **Prep Workflow**: MetDigSICP **Status**: Prepped **Prep Date**: 02/16/2017 09:29
Team: Metals **Prep Method**: EPA 3050B **Current Step**: Digestion **Due Date**: 02/22/2017
Analyst: APOSEY **Rush/NPDES**: N/A **Hold Date**: 07/27/2017

Lab Code	Client ID	Bottle #	Initial Amt	Initial Basis	Final Volume	Spike Amt	Spike ID	Comments
KQ1701710-01	Method Blank		1.00 g	As received	100 mL			10%HNO3, 10%HCl
KQ1701710-02	Lab Control Sample		1.00 g	As received	100 mL	2 mL 1 mL 1 mL 1 mL	177744 178641 178642 179314	10%HNO3, 10%HCl
K1700916-001	FTBL-SED-076-0-6-012817	.02	1.021 g	As received	100 mL			10%HNO3, 10%HCl;APOSEY K-BALANCE-49
K1700916-001: KQ1701710-03	Matrix Spike	.02	1.003 g	As received	100 mL	2 mL 1 mL 1 mL 1 mL	177744 178641 178642 179314	10%HNO3, 10%HCl;APOSEY K-BALANCE-49
K1700916-001: KQ1701710-04	Duplicate Matrix Spike	.02	1.028 g	As received	100 mL	2 mL 1 mL 1 mL 1 mL	177744 178641 178642 179314	10%HNO3, 10%HCl;APOSEY K-BALANCE-49
K1700916-002	FTBL-SED-075-0-6-012817	.02	1.051 g	As received	100 mL			10%HNO3, 10%HCl;APOSEY K-BALANCE-49
K1700916-003	FTBL-SED-074-0-6-012817	.02	1.023 g	As received	100 mL			10%HNO3, 10%HCl;APOSEY K-BALANCE-49

7 Total Samples consisting of 3 Client Samples, 2 Client QC Samples, 2 Batch QC Samples associated with the current Prep Run.

Spiking Solutions

Name	Type	ID	Expires	Name	Type	ID	Expires
K-MET SS1	Spike	177744	4/8/2017	K-MET SS4	Spike	178642	8/15/2017
K-MET SS3	Spike	178641	3/18/2017	K-MET SS5	Spike	179314	6/4/2017

Preparation Materials

Step	Name	ID	Step	Name	ID
Digestion	Teflon Chips	80163	Digestion	K-MET 100ml Centrifuge Tube	178771
Digestion	K-MET H2O2	175009	Digestion	K-MET HNO3	179179
Digestion	K-MET HCL	178073	Weigh	K-MET 100ml Centrifuge Tube	175825

Preparation Hardware / Equipment

Step	Name	Property	Value		Step	Name	Property	Value	
Digestion	K-Balance-02	Date Checked	2/16/2017		Digestion	K-BlockDigester-01	Observed Temperature	95	deg C
Digestion	K-BlockDigester-01	Corrected Temperature	95	deg C	Digestion	K-BlockDigester-01	Thermometer ID 3147615		NONE
Digestion	K-BlockDigester-01	Correction Factor	0	deg C	Digestion	K-BlockDigester-01	Thermometer Location	28	NONE

Preparation Steps

Step	Started	Finished	By	Assisted By	Training?	Comments
	16 FEB 17	16 FEB 17				

Weigh	09:29 16-FEB-17	09:52 16-FEB-17	APOSEY	N
Digestion	11:48	15:10	JHINSON	N

Comments

R1:15min; R2:150min; R3:15min.

Review

Reviewed by: [redacted] Date: 2/21/17

METALS SPIKING SOLUTIONS CONCENTRATIONS FORM

Solution Name	Element	mLs of 1000ppm Solution	Final Volume	Solution Conc. mg/L	Enter mls Added
K-MET SS1 *** Add after HNO3 and before ALS-89 when making the solution	HNO3	50.0	1000ml	-	
	Al	100*	1000ml	200	
	Ag	100*	1000ml	5	
	Ba	100*	1000ml	100	
	Be	100*	1000ml	5	
	Cd	100*	1000ml	5	
	Co	100*	1000ml	50	
	Cr	100*	1000ml	20	
	Cu	100*	1000ml	25	
	Fe	100*	1000ml	100	
	Pb	100*	1000ml	50	
	Mn	100*	1000ml	50	
	Ni	100*	1000ml	50	
	Sb***	50	1000ml	50	
	V	100*	1000ml	50	
	Zn	100*	1000ml	50	
K-MET SS2	HNO3	25.0	500ml	-	
	As	2.0	500ml	4	
	Cd	2.0	500ml	4	
	Pb	2.0	500ml	4	
	Se	2.0	500ml	4	
	Tl	2.0	500ml	4	
	Cu	2.0	500ml	4	
K-MET SS3	HNO3	25.0	500ml	-	
	As	50.0	500ml	100	
	Se	50.0	500ml	100	
	Tl	10.0	500ml	20	
	Hg	6	500	12	
K-MET SS4	HNO3	25	500ml	-	
	B	50	500ml	100	
	Mo	50	500ml	100	
K-MET SS5	HNO3	10.0	200ml	-	
	K**	20	200ml	1000	
	Na**	20	200ml	1000	
	Mg**	20	200ml	1000	
	Ca**	20	200ml	1000	
K-MET GFLCSW	HNO3	10.0	1000ml	-	
	As, Pb, Se, Tl	5.0	1000ml	2.5	
	Cd	-	-	1.25	
	Cu	2.5	1000ml	2.5	
K-MET QCP-CICV-1	Ca, Mg, Na, K	no dilution	-	2500	
	Al, Ba	no dilution	-	1000	
	Fe	no dilution	-	500	
	Co, Mn, Ni, V, Zn	no dilution	-	250	
	Cu, Ag	no dilution	-	125	
	Cr	no dilution	-	100	
	Be	no dilution	-	25	
K-MET QCP-CICV-3	As, Pb, Se, Tl	no dilution	-	500	
	Cd	no dilution	-	250	

* Denotes volume of mixed stock standard.
** Denotes 10,000 ppm individual stock standards.

Standard	mls of standard	ppm	Logbook #	Exp. Date

Pre-Prep Information Benchsheet

Prep Run #: 281760 **Prep Method:** **Team:** **Prep Due Date:** Feb-10-2017

#	Lab Code	Bottle	Test Name	Weight	Sample Comments	Test Comments
1	K1700916-001	.02	Metals T	1.021g		PrepComments:APOSEY K-BALANCE-49
2	K1700916-002	.02	Metals T	1.051g		PrepComments:APOSEY K-BALANCE-49
3	K1700916-003	.02	Metals T	1.023g		PrepComments:APOSEY K-BALANCE-49
4	K1700916-001 MS KQ1701700-01	.02	Metals T	1.003g		
5	K1700916-001 DMS KQ1701700-02	.02	Metals T	1.028g		

[redacted]

*% Solids is a calculated field meant solely as a reference value for verifying the presence of Total Solids in calculations

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1/95/28

Prep Run: 281771 **Prep Workflow:** MetDigSICP **Status:** Draft **Prep Date:** 02/16/2017 10:58
Team: Metals **Prep Method:** EPA 3050B **Current Step:** Weigh **Due Date:** 02/14/2017
Analyst: JHINSON **Rush/NPDES:** N/A **Hold Date:** 07/27/2017

* DOD 5.0

Lab Code	Client ID	Bottle #	Target Amt	Initial Amt	Initial Basis	Final Volume	Spike Amt	Spike ID	Comments
KQ1701710-01	Method Blank		1.00 g	1.04					
KQ1701710-02	Lab Control Sample		1.00 g	1.01			2 mL 1 mL 1 mL 1 mL	177744 178641 178642 179314	
K1700916-001	FTBL-SED-076-0-6-012817	.02	1.00 g						
K1700916-001: KQ1701710-03	Matrix Spike	.02	1.00 g				2 mL 1 mL 1 mL 1 mL	177744 178641 178642 179314	
K1700916-001: KQ1701710-04	Duplicate Matrix Spike	.02	1.00 g				2 mL 1 mL 1 mL 1 mL	177744 178641 178642 179314	
K1700916-002	FTBL-SED-075-0-6-012817	.02	1.00 g						
K1700916-003	FTBL-SED-074-0-6-012817	.02	1.00 g						

7 Total Samples consisting of 3 Client Samples, 2 Client QC Samples, 2 Batch QC Samples associated with the current Prep Run.

Spiking Solutions

Name	Type	ID	Expires
K-MET SS1	Spike	177744	4/8/2017
K-MET SS3	Spike	178641	3/18/2017

Name	Type	ID	Expires
K-MET SS4	Spike	178642	8/15/2017
K-MET SS5	Spike	179314	6/4/2017

tubes 1605323
HNO3 0000 152495
H202 5531 4549
HCl 0000 139084

R1 11:48 12:03
R2 12:10 12:40
H_2O_2 12:50 2:50
HCl 2:55 3:10

Preparation Materials

Preparation Hardware / Equipment

Preparation Steps

Step	Started	Finished	By	Assisted By	Training?	Comments
Weigh						

Service Request # K1700916,K1615021(#1 Zn rerun), K1615155

Instrument ID # K-ICP-[redacted]-04 05 2/22/17
Calibration 022117AMS 4 05
ALS LIMS Run # 535376

Cal Std: MS21-48-L
ICV Std: MS21-48-M
LLICV Std: MS21-45I
I.S. Solution: MS20-34-B

ICSA Std: MS21-47-J
ICSAB Std: MS21-47-K

ICP-MS Data Review Form

	Yes	No	NA
1. Appropriate standardization completed	X		
2. ICV in control (+/- 10%)	X		
3. CCV's in control (+/- 10%)	X		
4. ICB/CCB's below MRL	X		
5. LLICV standard analyzed and in control	X		
6. ICS standards within 20% of true value	X		
6. All analytes within instrument linear range	X		
7. Adequate rinse out time allowed	X		
8. Internal standards in control	X		
9. Interferences checked	X		
10. Was the run terminated? If so, why.		X	

See Benchsheet exception report for sample batch QC information.

Comments: K1700916: LLICVS out of control for Sb, see Reruns

Primary Review by [redacted] Date 2/22/17
Secondary Review by [redacted] Date 2/22/17

Data Review Form

Service Request #:	**K1700916**
Instrument ID#:	**K-ICP-MS-05**
DataFile Name:	**R:\ICP\WIP\DATA\K-ICP-MS-05 (Agilent)\022117A.csv**
RUNNO:	**535376**

There are no issues to report.

Primary Approver: [redacted] 2/17

Secondary Approver: [redacted] 2/17

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Data Review Form

Service Request #:	**K1615021**
Instrument ID#:	**K-ICP-MS-05**
DataFile Name:	**R:\ICP\WIP\DATA\K-ICP-MS-05 (Agilent)\022117A.csv**
RUNNO:	**535376**

There are no issues to report.

Primary Approver: [redacted] 2/22/17

Secondary Approver: _____

Data Review Form

Service Request #:	**K1615155**
Instrument ID#:	**K-ICP-MS-05**
DataFile Name:	**R:\ICP\WIP\DATA\K-ICP-MS-05 (Agilent)\022117A.csv**
RUNNO:	**535376**

There are no issues to report.

Primary Approver: [redacted] 2/22/17

Secondary Approver: [redacted] 2/17

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	Sample						
		Rjct	Data File	Acq. Date-Time	Type	Sample Name	Comment
1			002CALB.	2/21/2017 12:08:14 PM	CalBlk	Blank	
2			003CALB.	2/21/2017 12:11:42 PM	CalBlk	Blank	
3			004CALS.	2/21/2017 12:15:10 PM	CalStd	25ppb	
4			005_ICV.d	2/21/2017 12:18:38 PM	ICV	ICV	
5			006_CCV.	2/21/2017 12:22:06 PM	CCV	CCV	
6			007_ICB.d	2/21/2017 12:25:33 PM	ICB	ICB	
7			008_CCB.	2/21/2017 12:29:02 PM	CCB	CCB	
8	✓		009LICV.d	2/21/2017 12:32:30 PM	LLICV	LLICVS	
9			010LICV.d	2/21/2017 12:37:16 PM	LLICV	LLICVS	
10	✓		011SMPL.	2/21/2017 12:40:45 PM	Sample	LRSTD	
11	✓		012SMPL.	2/21/2017 12:45:23 PM	Sample	LRSTD	
12			013ICSA.d	2/21/2017 12:49:54 PM	ICSA	ICSA	
13			014ICSB.d	2/21/2017 12:53:22 PM	ICSB	ICSAB	
14			015_PB.d	2/21/2017 12:56:50 PM	PB	KQ1701710-01	5
15			016_LCS.d	2/21/2017 1:00:17 PM	LCS	KQ1701710-02	20
16			017_ARF.d	2/21/2017 1:03:45 PM	AllRef	K1700916-001	5
17			018SMPL.	2/21/2017 1:07:12 PM	Sample	K1700916-001L	25
18			019_PDS.d	2/21/2017 1:10:40 PM	PDS	K1700916-001A	5
19	✓		020_Spk.d	2/21/2017 1:14:07 PM	Spike	K1700916-001S	5
20	✓		021_Spk.d	2/21/2017 1:17:34 PM	Spike	K1700916-001S	5
21			022SMPL.	2/21/2017 1:21:01 PM	Sample	K1700916-002	5
22			023SMPL.	2/21/2017 1:24:27 PM	Sample	K1700916-003	5
23			024SMPL.	2/21/2017 1:27:54 PM	Sample	K17015021-001	5
24			025_CCV.	2/21/2017 1:31:23 PM	CCV	CCV	5
25	✓		026_CCB.	2/21/2017 1:34:50 PM	CCB	CCB	
26	✓		027_CCB.	2/21/2017 1:38:17 PM	CCB	CCB	
27			028_CCB.	2/21/2017 1:41:45 PM	CCB	CCB	
28	✓		029LCCV.	2/21/2017 1:45:12 PM	LLCCV	LLCCVS	
29	✓		030LCCV.	2/21/2017 1:48:39 PM	LLCCV	LLCCVS	
30	✓		031LCCV.	2/21/2017 1:52:07 PM	LLCCV	LLCCVS	
31	✓		032_QC1.d	2/21/2017 1:55:57 PM	QC1	LLCCVS 2X	
32	✓		033_QC1.d	2/21/2017 1:59:27 PM	QC1	LLCCVS 2X	
33	✓		034_QC1.d	2/21/2017 2:02:54 PM	QC1	LLCCVS 2X	
34			035_PB.d	2/21/2017 2:06:21 PM	PB	KQ1701768-01	5
35			036_LCS.d	2/21/2017 2:09:49 PM	LCS	KQ1701768-02	20

Sample

	Rjct	Data File	Acq. Date-Time	Type	Sample Name	Comment
36		037_ARF.d	2/21/2017 2:13:16 PM	AllRef	K1615155-008	5
37		038SMPL.	2/21/2017 2:16:43 PM	Sample	K1615155-008D	5
38		039_Spk.d	2/21/2017 2:20:11 PM	Spike	K1615155-008S	5
39		040_CCV.	2/21/2017 2:23:37 PM	CCV	CCV	5
40		041_CCB.	2/21/2017 2:27:04 PM	CCB	CCB	

Analyte

	Name	Mass	ISTD	Tune Mode
1	Be	9	45	No Gas
2	Ni	60	72	He
3	Ni	62	72	He
4	Cu	63	72	He
5	Cu	65	72	He
6	Zn	66	72	He
7	As	75	72	He
8	Se	77	72	H2
9	Se	78	72	H2
10	Sb	121	115	He
11	Sb	123	115	He
12	[Pb]	206	175	He
13	[Pb]	207	175	He
14	Pb	208	175	He
15	Li	6		No Gas
16	Sc	45		No Gas
17	Ge	72		He
18	Ge	72		H2
19	In	115		He
20	Lu	175		He

US EPA Tune Check Sample Report

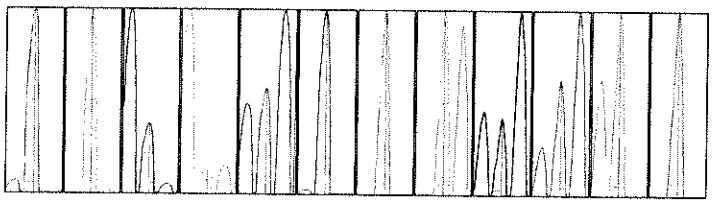
Batch Folder D:\Data\Experiments\022117A.b
Report Comment ALS Tune
Instrument Name G3281A JP13482848

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
7	125542	0.41	5.00	
9	38958	1.04	5.00	
24	155893	0.57	5.00	
25	20854	1.40	5.00	
26	25098	0.93	5.00	
59	204762	1.21	5.00	
115	286443	1.05	5.00	
206	71068	1.04	5.00	
207	65069	1.18	5.00	
208	156943	0.55	5.00	
209	246311	0.68	5.00	
238	336899	1.09	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
7	125898	125354	125591	124775	126091
9	39109	39579	38686	38859	38555
24	156790	156689	155958	154737	155290
25	20989	21299	20726	20562	20696
26	25513	25008	24986	24962	25022
59	207977	206862	202556	203487	202928
115	290064	287766	287034	285400	281952
206	72272	71021	71057	70681	70307
207	66310	65195	64346	64947	64545
208	157876	157739	156856	156348	155894
209	248509	245102	246672	246998	244271
238	341697	340023	334163	333723	334888

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
7	21142	7.00	6.9 - 7.1		0.784	0.900	
9	6960	8.95	8.9 - 9.1		0.739	0.900	
24	26944	23.95	23.9 - 24.1		0.754	0.900	
25	3552	24.95	24.9 - 25.1		0.748	0.900	
26	4177	25.95	25.9 - 26.1		0.750	0.900	
59	36846	58.95	58.9 - 59.1		0.753	0.900	
115	57937	115.00	114.9 - 115.1		0.765	0.900	
206	14198	206.00	205.9 - 206.1		0.797	0.900	
207	13057	207.00	206.9 - 207.1		0.771	0.900	
208	31207	208.00	207.9 - 208.1		0.804	0.900	
209	49382	209.00	208.9 - 209.1		0.808	0.900	
238	64944	238.00	237.9 - 238.1		0.827	0.900	

X% = 5 **Integration Time [sec] =** 0.1 **Acquisition Time [sec] =** 279 **Y Axis =** Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.57	L/min			
RF Matching	1.76	V	Option Gas	0.0	%			
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps			
S/C Temp	2	°C						

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	9.3	V			
Extract 2	-165.0	V	Cell Entrance	-30	V			
Omega Bias	-80	V	Cell Exit	-50	V			
Deflect	13.6	V						

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	false		3rd Gas Flow	0	%			
He Flow	0.0	mL/min	OctP Bias	-8.0	V			
H2 Flow	0.0	mL/min	OctP RF	170	V			
Energy Discrimination	5.0	V						

Calibration Blank Report

Sample Table

Sample Name	Blank
Data File Name	003CALB.d
Data Path Name	D:\Data\Experiments\022117A6.b
Acq Date Time	2017-02-21T12:11:42-08:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	Tune Mode	CPS	%RSD
Be	9	No Gas	13	156.85
Ni	60	He	70	23.56
Ni	62	He	27	292.73
Cu	63	He	96	11.15
Cu	65	He	54	12.99
Zn	66	He	128	3.12
As	75	He	11	218.66
Se	77	H2	712	0.24
Se	78	H2	5	701.41
Sb	121	He	144	6.46
Sb	123	He	108	14.96
[Pb]	206	He	38	71.34
[Pb]	207	He	23	220.73
Pb	208	He	136	10.48

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD
Li	6	No Gas	2646568	2.04
Sc	45	No Gas	7109800	3.58
Ge	72	He	90364	0.82
Ge	72	H2	1014499	0.97
In	115	He	857220	0.59
Lu	175	He	2500188	0.72

Calibration Standard Report

Sample Table

Sample Name	25ppb
Data File Name	004CALS.d
Data Path Name	D:\Data\Experiments\022117A6.b
Acq Date Time	2017-02-21T12:15:10-08:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	CPS	%RSD
Be	9	No Gas	139553	0.00
Ni	60	He	35770	0.00
Ni	62	He	5509	0.02
Cu	63	He	104108	0.00
Cu	65	He	52218	0.00
Zn	66	He	14502	0.01
As	75	He	7173	0.00
Se	77	H2	4964	0.04
Se	78	H2	13184	0.01
Sb	121	He	47139	0.00
Sb	123	He	38433	0.00
[Pb]	206	He	144401	0.00
[Pb]	207	He	129769	0.00
Pb	208	He	590798	0.00

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	2539468	0.61	2646568	95.95	30	120	
Sc	45	No Gas	7006630	0.56	7109800	98.55	30	120	
Ge	72	He	91984	1.26	90364	101.79	30	120	
Ge	72	H2	1032313	1.16	1014499	101.76	30	120	
In	115	He	848127	1.15	857220	98.94	30	120	
Lu	175	He	2521984	1.45	2500188	100.87	30	120	

Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICV
Data File Name	005_ICV.d
Data Path Name	D:\Data\Experiments\022117A6.b
Acq Date Time	2017-02-21T12:18:38-08:00
Sample Type	ICV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	2.528	0.858	14217	1.47	2.5	101	
Ni	60	He	25.352	0.494	35935	0.58	25	101	
Ni	62	He	26.112	4.218	5698	3.83	25	104	
Cu	63	He	12.906	0.632	53285	0.87	12.5	103	
Cu	65	He	12.743	2.047	26391	2.28	12.5	102	
Zn	66	He	22.982	1.492	13215	1.10	25	92	
As	75	He	25.990	2.513	7387	2.46	25	104	
Se	77	H2	25.929	0.163	5110	0.41	25	104	
Se	78	H2	26.441	1.729	13912	1.19	25	106	
Sb	121	He	25.717	1.158	48240	0.20	25	103	
Sb	123	He	25.853	1.713	39538	0.63	25	103	
[Pb]	206	He	25.016	1.918	144298	1.61	25	100	
[Pb]	207	He	25.777	2.265	133610	0.93	25	103	
Pb	208	He	25.403	2.089	599462	0.92	25	102	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	2565874	1.41	2646568	96.95	30	120	
Sc	45	No Gas	7052772	0.66	7109800	99.20	30	120	
Ge	72	He	91114	0.50	90364	100.83	30	120	
Ge	72	H2	1030040	0.55	1014499	101.53	30	120	
In	115	He	843868	1.08	857220	98.44	30	120	
Lu	175	He	2519150	3.01	2500188	100.76	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	006_CCV.d
Data Path Name	D:\Data\Experiments\022117A6.b
Acq Date Time	2017-02-21T12:22:06-08:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	24.920	1.283	138570	0.30	25	100	
Ni	60	He	24.608	0.606	35110	0.60	25	98	
Ni	62	He	25.608	5.384	5627	6.00	25	102	
Cu	63	He	24.877	1.619	103284	1.18	25	100	
Cu	65	He	24.870	1.810	51787	1.47	25	99	
Zn	66	He	24.771	1.648	14327	1.41	25	99	
As	75	He	25.481	1.234	7289	0.20	25	102	
Se	77	H2	25.231	1.227	4997	0.15	25	101	
Se	78	H2	25.365	0.751	13362	0.44	25	101	
Sb	121	He	25.074	1.827	47029	2.27	25	100	
Sb	123	He	25.029	0.973	38274	0.43	25	100	
[Pb]	206	He	25.049	0.885	143176	1.29	25	100	
[Pb]	207	He	24.953	0.625	128179	0.88	25	100	
Pb	208	He	25.088	0.476	586694	0.79	25	100	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	2536483	2.74	2646568	95.84	30	120	
Sc	45	No Gas	6979973	0.98	7109800	98.17	30	120	
Ge	72	He	91710	1.02	90364	101.49	30	120	
Ge	72	H2	1031234	1.10	1014499	101.65	30	120	
In	115	He	843614	0.57	857220	98.41	30	120	
Lu	175	He	2495396	0.47	2500188	99.81	30	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB
Data File Name	007_ICB.d
Data Path Name	D:\Data\Experiments\022117A6.b
Acq Date Time	2017-02-21T12:25:33-08:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	0.003	33.9	29	20.0	0.04	
Ni	60	He	0.001	999.2	71	10.8	0.2	
Ni	62	He	0.087	22.1	46	8.5	0.2	
Cu	63	He	0.001	801.7	100	32.1	0.2	
Cu	65	He	0.000	-5720.2	54	46.4	0.2	
Zn	66	He	0.228	20.1	258	11.0	1	
As	75	He	-0.004	-336.1	10	34.6	0.25	
Se	77	H2	0.209	101.5	748	3.5	20	
Se	78	H2	0.022	41.3	16	28.6	0.5	
Sb	121	He	0.013	76.2	167	9.8	0.2	
Sb	123	He	0.016	138.5	132	24.4	0.05	
[Pb]	206	He	0.005	58.6	66	25.1	0.1	
[Pb]	207	He	0.006	42.5	52	22.4	0.1	
Pb	208	He	0.003	8.7	219	2.3	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	2604393	1.27	2646568	98.41	30	120	
Sc	45	No Gas	7089002	1.27	7109800	99.71	30	120	
Ge	72	He	90815	0.90	90364	100.50	30	120	
Ge	72	H2	1016759	1.70	1014499	100.22	30	120	
In	115	He	852697	1.09	857220	99.47	30	120	
Lu	175	He	2529327	0.96	2500188	101.17	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	008_CC8.d
Data Path Name	D:\Data\Experiments\022117A6.b
Acq Date Time	2017-02-21T12:29:02-08:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	0.002	21.4	26	11.5	0.04	
Ni	60	He	0.010	181.4	86	31.7	0.2	
Ni	62	He	0.004	585.6	28	18.3	0.2	
Cu	63	He	0.003	251.1	110	30.3	0.2	
Cu	65	He	0.002	319.5	60	25.5	0.2	
Zn	66	He	0.215	33.8	252	16.5	1	
As	75	He	-0.017	-24.3	6	18.2	0.25	
Se	77	H2	-0.010	-1052.9	713	2.7	20	
Se	78	H2	0.012	32.3	11	18.2	0.5	
Sb	121	He	0.002	580.8	147	11.5	0.2	
Sb	123	He	0.011	75.5	124	9.4	0.05	
[Pb]	206	He	0.000	1370.3	39	24.7	0.1	
[Pb]	207	He	0.004	68.1	47	32.7	0.1	
Pb	208	He	0.002	60.3	188	15.5	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	2590586	3.59	2646568	97.88	30	120	
Sc	45	No Gas	7026262	0.55	7109800	98.83	30	120	
Ge	72	He	91573	1.12	90364	101.34	30	120	
Ge	72	H2	1018922	0.44	1014499	100.44	30	120	
In	115	He	852869	0.75	857220	99.49	30	120	
Lu	175	He	2525869	1.14	2500188	101.03	30	120	

Low Level Initial Calibration Verification (LLICV) Report

Sample Table

Sample Name	LLICVS
Data File Name	009LICV.d
Data Path Name	D:\Data\Experiments\022117A6.b
Acq Date Time	2017-02-21T12:32:30-08:00
Sample Type	LLICV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

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QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	0.170	2.915	969	3.61	0.04	426	LLICV Failed
Ni	60	He	0.523	4.185	806	3.84	0.4	131	LLICV Failed
Ni	62	He	0.535	10.103	142	7.16	0.4	134	
Cu	63	He	0.337	3.545	1479	2.48	0.2	169	LLICV Failed
Cu	65	He	0.312	13.480	697	12.85	0.2	156	LLICV Failed
Zn	66	He	0.902	14.267	639	10.25	1	90	
As	75	He	1.204	2.852	351	1.71	1	120	LLICV Failed
Se	77	H2	2.234	10.767	1093	3.14	2	112	
Se	78	H2	2.148	1.807	1126	1.48	2	107	
Sb	121	He	0.234	2.443	583	2.15	0.1	234	LLICV Failed
Sb	123	He	0.233	6.355	464	5.25	0.1	233	LLICV Failed
[Pb]	206	He	0.236	2.720	1393	2.28	0.1	236	LLICV Failed
[Pb]	207	He	0.253	6.682	1332	6.95	0.1	253	LLICV Failed
Pb	208	He	0.240	1.175	5792	0.84	0.1	240	LLICV Failed

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	2598651	1.90	2646568	98.19	30	120	
Sc	45	No Gas	7051998	0.75	7109800	99.19	30	120	
Ge	72	He	90647	1.10	90364	100.31	30	120	
Ge	72	H2	1022708	0.64	1014499	100.81	30	120	
In	115	He	847223	1.23	857220	98.83	30	120	
Lu	175	He	2513361	0.58	2500188	100.53	30	120	

Low Level Initial Calibration Verification (LLICV) Report

Sample Table

Sample Name	LLICVS
Data File Name	010LICV.d
Data Path Name	D:\Data\Experiments\022117A6.b
Acq Date Time	2017-02-21T12:37:16-08:00
Sample Type	LLICV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	0.042	11.543	250	11.82	0.04	106	
Ni	60	He	0.397	14.769	631	13.12	0.4	99	
Ni	62	He	0.347	38.884	102	29.23	0.4	87	
Cu	63	He	0.214	8.519	977	7.26	0.2	107	
Cu	65	He	0.204	3.560	477	2.80	0.2	102	
Zn	66	He	0.828	6.739	600	5.85	1	83	
As	75	He	1.051	11.784	309	11.57	1	105	
Se	77	H2	2.068	5.724	1059	1.41	2	103	
Se	78	H2	2.039	4.305	1064	4.47	2	102	
Sb	121	He	0.108	20.022	346	11.00	0.1	108	
Sb	123	He	0.108	15.126	273	10.07	0.1	108	
[Pb]	206	He	0.107	4.936	656	4.32	0.1	107	
[Pb]	207	He	0.100	10.082	541	8.72	0.1	100	
Pb	208	He	0.102	3.930	2532	2.70	0.1	102	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	2580054	2.86	2646568	97.49	30	120	
Sc	45	No Gas	7029836	0.96	7109800	98.88	30	120	
Ge	72	He	91016	0.56	90364	100.72	30	120	
Ge	72	H2	1017041	0.60	1014499	100.25	30	120	
In	115	He	847113	1.14	857220	98.82	30	120	
Lu	175	He	2518622	1.12	2500188	100.74	30	120	

Sample Report

Sample Table

Sample Name	LRSTD
Data File Name	011SMPL.d
Data Path Name	D:\Data\Experiments\022117A6.b
Acq Date Time	2017-02-21T12:40:45-08:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	561.404	0.61	3025032	0.02	
Ni	60	He	540.507	1.68	772193	0.07	
Ni	62	He	557.514	1.79	122300	0.46	
Cu	63	He	555.899	1.42	2313468	0.02	
Cu	65	He	539.862	0.75	1126760	0.05	
Zn	66	He	486.273	1.02	279753	0.17	
As	75	He	554.787	1.26	158997	0.35	
Se	77	H2	561.053	1.52	95195	0.59	
Se	78	H2	566.224	2.12	296380	0.19	
Sb	121	He	554.984	0.71	1023449	0.05	
Sb	123	He	555.905	0.81	836029	0.07	
[Pb]	206	He	581.346	1.27	3302414	0.02	
[Pb]	207	He	561.385	2.42	2865738	0.02	
Pb	208	He	563.813	1.32	13104123	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	2491061	2.71	2646568	94.12	30	120	
Sc	45	No Gas	6764425	2.17	7109800	95.14	30	120	
Ge	72	He	92013	0.94	90364	101.82	30	120	
Ge	72	H2	1025210	1.65	1014499	101.06	30	120	
In	115	He	831868	0.77	857220	97.04	30	120	
Lu	175	He	2481227	2.71	2500188	99.24	30	120	

Sample Report

Sample Table

Sample Name	LRSTD
Data File Name	012SMPL.d
Data Path Name	D:\Data\Experiments\022117A6.b
Acq Date Time	2017-02-21T12:45:23-08:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	494.216	1.19	2670981	0.02	
Ni	60	He	485.530	0.21	680974	0.07	
Ni	62	He	496.477	0.96	106922	0.46	
Cu	63	He	496.435	2.10	2028239	0.02	
Cu	65	He	486.359	0.79	996486	0.05	
Zn	66	He	435.657	1.00	246057	0.18	
As	75	He	494.269	0.86	139061	0.36	
Se	77	H2	494.271	0.57	83547	0.59	
Se	78	H2	497.580	0.48	259222	0.19	
Sb	121	He	489.958	0.85	900601	0.05	
Sb	123	He	489.224	0.59	733359	0.07	
[Pb]	206	He	524.184	1.20	2938692	0.02	
[Pb]	207	He	517.147	0.78	2606037	0.02	
Pb	208	He	511.808	0.66	11740722	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	2449697	0.84	2646568	92.56	30	120	
Sc	45	No Gas	6785006	1.69	7109800	95.43	30	120	
Ge	72	He	90322	0.26	90364	99.95	30	120	
Ge	72	H2	1020133	0.37	1014499	100.56	30	120	
In	115	He	829167	1.36	857220	96.73	30	120	
Lu	175	He	2448350	0.87	2500188	97.93	30	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA
Data File Name	013ICSA.d
Data Path Name	D:\Data\Experiments\022117A6.b
Acq Date Time	2017-02-21T12:49:54-08:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	QC Flag
Be	9	No Gas	0.060	5.8	329	6.8	
Ni	60	He	0.580	18.3	853	16.4	
Ni	62	He	0.672	2.1	166	1.2	
Cu	63	He	0.649	1.2	2656	1.8	
Cu	65	He	0.676	6.7	1391	5.8	
Zn	66	He	0.775	5.5	547	4.8	
As	75	He	0.145	28.0	50	22.7	
Se	77	H2	0.921	16.1	837	3.0	
Se	78	H2	0.157	7.9	83	7.5	
Sb	121	He	0.188	5.4	453	3.6	
Sb	123	He	0.182	20.4	353	14.9	
[Pb]	206	He	0.231	1.6	1301	2.9	
[Pb]	207	He	0.206	17.1	1032	14.7	
Pb	208	He	0.216	5.4	4978	2.5	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	2356314	0.72	2646568	89.03	30	120	
Sc	45	No Gas	6604906	1.77	7109800	92.90	30	120	
Ge	72	He	87363	0.67	90364	96.68	30	120	
Ge	72	H2	981404	0.28	1014499	96.74	30	120	
In	115	He	774510	0.23	857220	90.35	30	120	
Lu	175	He	2392794	2.88	2500188	95.70	30	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB
Data File Name	014ICSB.d
Data Path Name	D:\Data\Experiments\022117A6.b
Acq Date Time	2017-02-21T12:53:22-08:00
Sample Type	ICSB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	0.053	13.695	297	13.01	-1	-5.3	
Ni	60	He	51.814	0.370	72440	0.77	50	103.6	
Ni	62	He	52.849	0.596	11359	0.73	50	105.7	
Cu	63	He	51.063	0.205	207868	1.02	50	102.1	
Cu	6S	He	51.283	0.784	104698	1.18	50	102.6	
Zn	66	He	24.096	0.507	13675	1.57	25	96.4	
As	75	He	27.753	0.261	7787	1.11	25	111.0	
Se	77	H2	28.295	1.040	5392	0.94	25	113.2	
Se	78	H2	27.966	1.125	14399	1.43	25	111.9	
Sb	121	He	0.132	13.757	359	8.85	-1	-13.2	
Sb	123	He	0.122	7.356	271	4.97	-1	-12.2	
[Pb]	206	He	0.170	6.854	980	5.66	-1	-17.0	
[Pb]	207	He	0.185	8.585	946	8.85	-1	-18.5	
Pb	208	He	0.173	3.483	4057	2.S7	-1	-17.3	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	2338731	3.53	2646568	88.37	30	120	
Sc	45	No Gas	6712554	1.40	7109800	94.41	30	120	
Ge	72	He	89960	1.13	90364	99.55	30	120	
Ge	72	H2	1007930	0.69	1014499	99.35	30	120	
In	115	He	779506	0.31	857220	90.93	30	120	
Lu	175	He	2424615	0.93	2500188	96.98	30	120	

Prep Blank (PB) Report

Sample Table

Sample Name	KQ1701710-01
Data File Name	015_PB.d
Data Path Name	D:\Data\Experiments\022117A6.b
Acq Date Time	2017-02-21T12:56:50-08:00
Sample Type	PB
Dilution	1
Comment	5
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	0.015	9.3	98	7.7	0.04	
Ni	60	He	0.061	38.6	167	21.6	0.2	
Ni	62	He	-0.017	-98.1	24	15.8	0.2	
Cu	63	He	0.175	5.7	868	5.1	0.2	
Cu	65	He	0.173	5.9	438	5.2	0.2	
Zn	66	He	0.439	5.2	401	3.5	1	
As	75	He	0.017	113.5	17	35.3	0.25	
Se	77	H2	-0.132	-115.5	722	3.8	2	
Se	78	H2	0.048	40.7	31	34.1	0.5	
Sb	121	He	-0.003	-393.5	146	17.2	0.1	
Sb	123	He	0.012	105.5	133	15.2	0.05	
[Pb]	206	He	0.035	22.9	257	19.6	0.1	
[Pb]	207	He	0.038	25.3	237	23.3	0.1	
Pb	208	He	0.035	10.1	1036	9.2	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	2754005	1.38	2646568	104.06	30	120	
Sc	45	No Gas	7247626	0.47	7109800	101.94	30	120	
Ge	72	He	96479	0.75	90364	106.77	30	120	
Ge	72	H2	1061475	0.50	1014499	104.63	30	120	
In	115	He	901602	0.20	857220	105.18	30	120	
Lu	175	He	2699110	0.81	2500188	107.96	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	KQ1701710-02
Data File Name	016_LCS.d
Data Path Name	D:\Data\Experiments\022117A6.b
Acq Date Time	2017-02-21T13:00:17-08:00
Sample Type	LCS
Dilution	1
Comment	20
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	4.987	0.804	28226	1.16	5	99.7	
Ni	60	He	50.482	0.584	72596	0.74	50	101.0	
Ni	62	He	52.837	4.116	11681	3.86	50	105.7	
Cu	63	He	25.340	0.246	106155	1.10	25	101.4	
Cu	65	He	25.354	2.397	53260	1.18	25	101.4	
Zn	66	He	45.694	0.972	26555	1.00	50	91.4	
As	75	He	52.246	0.778	15068	0.52	50	104.5	
Se	77	H2	50.585	1.392	9418	0.90	50	101.2	
Se	78	H2	51.403	1.385	27438	1.22	50	102.8	
Sb	121	He	48.902	0.402	92275	1.46	50	97.8	
Sb	123	He	48.958	0.815	75325	0.28	50	97.9	
[Pb]	206	He	49.669	0.918	290200	0.67	50	99.3	
[Pb]	207	He	51.160	0.771	268642	0.70	50	102.3	
Pb	208	He	50.517	0.625	1207609	0.43	50	101.0	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	2494148	2.52	2646568	94.24	30	120	
Sc	45	No Gas	7101140	0.70	7109800	99.88	30	120	
Ge	72	He	92532	1.25	90364	102.40	30	120	
Ge	72	H2	1045099	0.42	1014499	103.02	30	120	
In	115	He	849964	1.06	857220	99.15	30	120	
Lu	175	He	2551179	0.36	2500188	102.04	30	120	

All Reference Sample Report

Sample Table

Sample Name	K1700916-001
Data File Name	017_ARF.d
Data Path Name	D:\Data\Experiments\022117A6.b
Acq Date Time	2017-02-21T13:03:45-08:00
Sample Type	AllRef
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	3.551	1.64	20706	0.02	
Ni	60	He	7.971	2.93	12309	0.06	
Ni	62	He	7.839	2.04	1876	0.42	
Cu	63	He	8.842	0.99	39628	0.02	
Cu	65	He	9.088	3.14	20430	0.04	
Zn	66	He	63.804	0.31	39549	0.16	
As	75	He	8.394	2.96	2596	0.32	
Se	77	H2	4.660	7.68	1549	0.30	
Se	78	H2	1.328	1.18	721	0.18	
Sb	121	He	0.115	9.61	376	0.03	
Sb	123	He	0.120	9.72	304	0.04	
[Pb]	206	He	15.730	1.85	94667	0.02	
[Pb]	207	He	13.772	1.31	74490	0.02	
Pb	208	He	14.946	1.35	368036	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	2717226	0.80	2646568	102.67	30	120	
Sc	45	No Gas	7315322	1.21	7109800	102.89	30	120	
Ge	72	He	98827	0.45	90364	109.37	30	120	
Ge	72	H2	1056226	0.48	1014499	104.11	30	120	
In	115	He	886417	1.16	857220	103.41	30	120	
Lu	175	He	2627579	1.64	2500188	105.10	30	120	

Sample Report

Sample Table

Sample Name	K1700916-001L
Data File Name	018SMPL.d
Data Path Name	D:\Data\Experiments\022117A6.b
Acq Date Time	2017-02-21T13:07:12-08:00
Sample Type	Sample
Dilution	1
Comment	25
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	0.701	0.44	4066	0.02	
Ni	60	He	1.663	3.12	2562	0.06	
Ni	62	He	1.541	6.55	382	0.40	
Cu	63	He	1.879	2.61	8290	0.02	
Cu	65	He	1.838	0.70	4075	0.05	
Zn	66	He	13.097	2.87	8024	0.16	
As	75	He	1.740	3.38	534	0.33	
Se	77	H2	1.170	15.78	955	0.12	
Se	78	H2	0.275	7.07	155	0.18	
Sb	121	He	0.034	57.87	211	0.02	
Sb	123	He	0.034	18.56	163	0.02	
[Pb]	206	He	3.274	1.87	19204	0.02	
[Pb]	207	He	2.847	3.81	14994	0.02	
Pb	208	He	3.079	2.56	73851	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	2604216	1.55	2646568	98.40	30	120	
Sc	45	No Gas	7258990	0.66	7109800	102.10	30	120	
Ge	72	He	96352	0.92	90364	106.63	30	120	
Ge	72	H2	1068134	0.49	1014499	105.29	30	120	
In	115	He	866438	1.14	857220	101.08	30	120	
Lu	175	He	2556576	3.30	2500188	102.26	30	120	

Post Digestion Spike Sample (PDS) Report

Sample Table

Sample Name	K1700916-001A
Data File Name	019_PDS.d
Data Path Name	D:\Data\Experiments\022117A6.b
Acq Date Time	2017-02-21T13:10:40-08:00
Sample Type	PDS
Dilution	1
Comment	5
QC Ref File Name	017_ARF.d
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Spk Amt	%Rec	QC Flag
Be	9	No Gas	54.831	2.020	323842	1.38	50	103	
Ni	60	He	55.129	1.811	86702	1.35	50	94	
Ni	62	He	56.722	2.613	13711	0.46	50	98	
Cu	63	He	56.893	1.898	260515	0.67	50	96	
Cu	65	He	56.916	1.971	130707	1.10	50	96	
Zn	66	He	106.509	0.934	67514	1.46	50	85	
As	75	He	59.209	2.671	18676	2.42	50	102	
Se	77	H2	57.714	0.263	10966	0.90	50	106	
Se	78	H2	54.979	0.521	30241	0.42	50	107	
Sb	121	He	51.420	0.198	102626	0.81	50	103	
Sb	123	He	50.982	1.056	82976	1.60	50	102	
[Pb]	206	He	64.822	1.579	394475	0.73	50	98	
[Pb]	207	He	62.367	1.143	341127	1.05	50	97	
Pb	208	He	63.854	0.922	1589997	1.16	50	98	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	2743246	1.44	2646568	103.65	30	120	
Sc	45	No Gas	7414388	0.89	7109800	104.28	30	120	
Ge	72	He	101223	2.36	90364	112.02	30	120	
Ge	72	H2	1076937	0.66	1014499	106.15	30	120	
In	115	He	899105	0.70	857220	104.89	30	120	
Lu	175	He	2657774	2.00	2500188	106.30	30	120	

Matrix Spike Sample (MS) Report

Sample Table

Sample Name	K1700916-001S
Data File Name	020_Spk.d
Data Path Name	D:\Data\Experiments\022117A6.b
Acq Date Time	2017-02-21T13:14:07-08:00
Sample Type	Spike
Dilution	1
Comment	5
QC Ref File Name	017_ARF.d
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Spk Amt	%Rec	QC Flag
Be	9	No Gas	23.869	1.461	141515	0.32	20	102	
Ni	60	He	206.584	0.410	314413	1.31	200	99	
Ni	62	He	212.876	2.587	49748	1.41	200	103	
Cu	63	He	106.211	1.550	470836	0.63	100	97	
Cu	65	He	105.843	0.879	235325	0.90	100	97	
Zn	66	He	242.454	1.285	148622	0.44	200	89	
As	75	He	212.021	1.906	64718	0.39	200	102	
Se	77	H2	211.277	1.388	37462	1.16	200	103	
Se	78	H2	212.899	0.721	115028	0.52	200	106	
Sb	121	He	123.598	0.873	241350	0.40	200	62	Flag
Sb	123	He	124.104	0.861	197629	0.51	200	62	Flag
[Pb]	206	He	212.200	0.919	1292045	0.96	200	98	
[Pb]	207	He	213.978	0.648	1170991	1.04	200	100	
Pb	208	He	216.754	0.546	5399936	1.06	200	101	

PDJ GK

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	2709594	1.44	2646568	102.38	30	120	
Sc	45	No Gas	7442706	1.70	7109800	104.68	30	120	
Ge	72	He	98003	1.66	90364	108.45	30	120	
Ge	72	H2	1057984	0.20	1014499	104.29	30	120	
In	115	He	880477	0.71	857220	102.71	30	120	
Lu	175	He	2659007	1.25	2500188	106.35	30	120	

Matrix Spike Sample (MS) Report

Sample Table

Sample Name	K1700916-001SD
Data File Name	021_Spk.d
Data Path Name	D:\Data\Experiments\022117A6.b
Acq Date Time	2017-02-21T13:17:34-08:00
Sample Type	Spike
Dilution	1
Comment	5
QC Ref File Name	017_ARF.d
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Spk Amt	%Rec	QC Flag
Be	9	No Gas	23.487	0.863	141153	0.54	20	100	
Ni	60	He	207.456	0.688	317487	0.77	200	100	
Ni	62	He	210.970	1.545	49S86	1.37	200	102	
Cu	63	He	106.437	0.432	474502	0.27	100	98	
Cu	65	He	105.911	1.073	236792	1.09	100	97	
Zn	66	He	245.332	0.953	151231	0.86	200	91	
As	75	He	211.263	0.953	64853	0.88	200	101	
Se	77	H2	209.664	0.797	37586	0.44	200	103	
Se	78	H2	209.567	0.506	114460	0.10	200	104	
Sb	121	He	124.849	0.478	246814	1.22	200	62	Flag
Sb	123	He	124.617	1.613	200886	0.95	200	62	Flag
[Pb]	206	He	217.419	1.731	1284436	1.17	200	101	
[Pb]	207	He	221.923	0.721	1178417	1.24	200	104	
Pb	208	He	224.614	0.703	5429654	1.40	200	105	

PDS OK

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	2717840	1.59	2646568	102.69	30	120	
Sc	45	No Gas	7543832	1.08	7109800	106.10	30	120	
Ge	72	He	98541	0.18	90364	109.05	30	120	
Ge	72	H2	1069503	0.49	1014499	105.42	30	120	
In	115	He	891381	1.40	857220	103.99	30	120	
Lu	175	He	2580205	1.89	2500188	103.20	30	120	

Sample Report

Sample Table

Sample Name	K1700916-002
Data File Name	022SMPL.d
Data Path Name	D:\Data\Experiments\022117A6.b
Acq Date Time	2017-02-21T13:21:01-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	2.514	1.48	15047	0.02	
Ni	60	He	4.834	3.45	7693	0.06	
Ni	62	He	4.770	4.04	1183	0.40	
Cu	63	He	5.656	1.49	26061	0.02	
Cu	65	He	5.639	2.81	13037	0.04	
Zn	66	He	81.540	0.87	51845	0.16	
As	75	He	6.824	3.68	2169	0.31	
Se	77	H2	3.147	13.98	1321	0.24	
Se	78	H2	0.737	3.96	413	0.18	
Sb	121	He	0.111	16.53	378	0.03	
Sb	123	He	0.122	9.24	316	0.04	
[Pb]	206	He	15.273	0.70	93865	0.02	
[Pb]	207	He	12.786	1.02	70616	0.02	
Pb	208	He	14.189	0.79	356777	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	2707806	0.32	2646568	102.31	30	120	
Sc	45	No Gas	7507533	0.69	7109800	105.59	30	120	
Ge	72	He	101451	0.07	90364	112.27	30	120	
Ge	72	H2	1083506	1.02	1014499	106.80	30	120	
In	115	He	912061	0.88	857220	106.40	30	120	
Lu	175	He	2682759	1.00	2500188	107.30	30	120	

Sample Report

Sample Table

Sample Name	K1700916-003
Data File Name	023SMPL.d
Data Path Name	D:\Data\Experiments\022117A6.b
Acq Date Time	2017-02-21T13:24:27-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	2.825	1.04	17347	0.02	
Ni	60	He	10.030	1.25	15883	0.06	
Ni	62	He	10.307	1.90	2524	0.41	
Cu	63	He	10.571	1.65	48632	0.02	
Cu	65	He	10.506	1.00	24246	0.04	
Zn	66	He	126.207	1.44	80194	0.16	
As	75	He	8.448	3.67	2683	0.31	
Se	77	H2	2.556	8.23	1224	0.21	
Se	78	H2	0.629	8.25	356	0.18	
Sb	121	He	0.161	4.15	479	0.03	
Sb	123	He	0.167	13.56	391	0.04	
[Pb]	206	He	47.157	0.19	290014	0.02	
[Pb]	207	He	39.872	1.31	220359	0.02	
Pb	208	He	43.843	0.78	1103133	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	2705391	1.48	2646568	102.22	30	120	
Sc	45	No Gas	7703482	0.82	7109800	108.35	30	120	
Ge	72	He	101497	1.13	90364	112.32	30	120	
Ge	72	H2	1091181	0.54	1014499	107.56	30	120	
In	115	He	911696	0.88	857220	106.35	30	120	
Lu	175	He	2685349	1.40	2500188	107.41	30	120	

Sample Report

Sample Table	K1615021-001
Sample Name	~~K17015021-001~~ 2/22/17
Data File Name	024SMPL.d
Data Path Name	D:\Data\Experiments\022117A6.b
Acq Date Time	2017-02-21T13:27:54-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	0.051	7.41	303	0.02	
Ni	60	He	2.815	0.20	4057	0.07	
Ni	62	He	2.943	9.27	667	0.44	
Cu	63	He	1.488	4.49	6233	0.02	
Cu	65	He	1.560	6.42	3281	0.05	
Zn	66	He	8.938	1.55	5224	0.17	
As	75	He	11.906	1.64	3393	0.35	
Se	77	H2	7.611	3.39	1950	0.39	
Se	78	H2	0.271	7.28	143	0.19	
Sb	121	He	0.294	3.64	684	0.04	
Sb	123	He	0.299	7.02	556	0.05	
[Pb]	206	He	5.820	1.02	33560	0.02	
[Pb]	207	He	5.600	1.54	29011	0.02	
Pb	208	He	5.719	2.08	134869	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	2527474	0.40	2646568	95.50	30	120	
Sc	45	No Gas	7202649	0.71	7109800	101.31	30	120	
Ge	72	He	91210	1.13	90364	100.94	30	120	
Ge	72	H2	999090	0.38	1014499	98.48	30	120	
In	115	He	833859	0.59	857220	97.27	30	120	
Lu	175	He	2515514	2.39	2500188	100.61	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	025_CCV.d
Data Path Name	D:\Data\Experiments\022117A6.b
Acq Date Time	2017-02-21T13:31:23-08:00
Sample Type	CCV
Dilution	1
Comment	5
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	24.883	0.353	145566	0.37	25	100	
Ni	60	He	24.545	1.586	36986	0.96	25	98	
Ni	62	He	24.915	1.807	5781	1.38	25	100	
Cu	63	He	24.664	1.932	108151	1.31	25	99	
Cu	65	He	24.931	1.093	54837	1.72	25	100	
Zn	66	He	24.962	1.900	15247	1.41	25	100	
As	75	He	25.227	1.065	7623	1.28	25	101	
Se	77	H2	25.185	0.419	5212	0.53	25	101	
Se	78	H2	25.085	0.625	13803	0.62	25	100	
Sb	121	He	24.980	0.865	49200	2.10	25	100	
Sb	123	He	24.987	1.712	40123	2.07	25	100	
[Pb]	206	He	24.767	2.554	147978	1.18	25	99	
[Pb]	207	He	24.580	1.855	131996	0.54	25	98	
Pb	208	He	24.704	2.371	603893	0.60	25	99	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	2696104	1.57	2646568	101.87	30	120	
Sc	45	No Gas	7342892	0.58	7109800	103.28	30	120	
Ge	72	He	96861	0.63	90364	107.19	30	120	
Ge	72	H2	1077138	0.63	1014499	106.17	30	120	
In	115	He	885838	1.39	857220	103.34	30	120	
Lu	175	He	2609237	1.82	2500188	104.36	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	026_CCB.d
Data Path Name	D:\Data\Experiments\022117A6.b
Acq Date Time	2017-02-21T13:34:50-08:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	0.006	31.3	49	21.4	0.04	
Ni	60	He	-0.015	-79.5	51	33.5	0.2	
Ni	62	He	0.031	139.1	34	27.9	0.2	
Cu	63	He	0.017	11.4	169	4.6	0.2	
Cu	65	He	0.006	125.6	69	22.9	0.2	
Zn	66	He	0.112	72.5	198	24.1	1	
As	75	He	0.009	101.4	14	18.9	0.25	
Se	77	H2	0.269	21.5	778	1.2	20	
Se	78	H2	0.033	24.8	22	18.6	0.5	
Sb	121	He	0.058	43.8	264	19.1	0.2	
Sb	123	He	0.057	33.8	203	14.9	0.05	CCB Failed
[Pb]	206	He	0.016	6.6	132	3.9	0.1	
[Pb]	207	He	0.017	21.8	113	17.9	0.1	
Pb	208	He	0.014	4.4	488	3.8	0.1	

7 MRL SPK PENDING

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	2758573	4.86	2646568	104.23	30	120	
Sc	45	No Gas	7325460	1.76	7109800	103.03	30	120	
Ge	72	He	93588	0.22	90364	103.57	30	120	
Ge	72	H2	1043536	0.91	1014499	102.86	30	120	
In	115	He	889838	0.42	857220	103.81	30	120	
Lu	175	He	2599497	0.89	2500188	103.97	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	027_CCB.d
Data Path Name	D:\Data\Experiments\022117A6.b
Acq Date Time	2017-02-21T13:38:17-08:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

2/22/17

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	0.006	12.5	47	7.7	0.04	
Ni	60	He	0.004	356.2	80	29.2	0.2	
Ni	62	He	0.009	275.8	30	19.2	0.2	
Cu	63	He	0.006	75.6	124	14.7	0.2	
Cu	65	He	0.009	67.2	76	16.7	0.2	
Zn	66	He	0.134	23.2	213	8.3	1	
As	75	He	-0.001	-295.4	11	5.1	0.25	
Se	77	H2	0.280	54.0	777	3.3	20	
Se	78	H2	0.024	28.9	17	20.3	0.5	
Sb	121	He	0.031	29.2	211	8.3	0.2	
Sb	123	He	0.052	45.4	197	19.5	0.05	CCB Failed
[Pb]	206	He	0.010	27.6	101	16.3	0.1	
[Pb]	207	He	0.009	14.3	76	9.2	0.1	
Pb	208	He	0.010	17.5	392	10.6	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	2680860	1.41	2646568	101.30	30	120	
Sc	45	No Gas	7464216	1.67	7109800	104.98	30	120	
Ge	72	He	94830	0.40	90364	104.94	30	120	
Ge	72	H2	1039358	0.70	1014499	102.45	30	120	
In	115	He	889310	0.75	857220	103.74	30	120	
Lu	175	He	2626279	0.53	2500188	105.04	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	028_CCB.d
Data Path Name	D:\Data\Experiments\022117A6.b
Acq Date Time	2017-02-21T13:41:45-08:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

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QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	0.005	57.6	39	38.9	0.04	
Ni	60	He	-0.016	-17.5	49	7.9	0.2	
Ni	62	He	-0.034	-309.4	20	116.7	0.2	
Cu	63	He	0.012	24.2	151	8.9	0.2	
Cu	65	He	0.007	94.2	71	19.5	0.2	
Zn	66	He	0.125	35.9	206	13.0	1	
As	75	He	0.003	251.6	12	18.7	0.25	
Se	77	H2	0.310	81.4	782	5.5	20	
Se	78	H2	0.027	52.1	19	39.2	0.5	
Sb	121	He	0.040	24.2	228	9.0	0.2	
Sb	123	He	0.041	18.8	177	6.6	0.05	
[Pb]	206	He	0.002	106.2	52	25.8	0.1	
[Pb]	207	He	0.010	5.7	78	2.5	0.1	
Pb	208	He	0.007	20.8	317	10.2	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	2674470	1.49	2646568	101.05	30	120	
Sc	45	No Gas	7219882	0.46	7109800	101.55	30	120	
Ge	72	He	93697	0.66	90364	103.69	30	120	
Ge	72	H2	1039166	0.34	1014499	102.43	30	120	
In	115	He	882053	1.15	857220	102.90	30	120	
Lu	175	He	2585918	1.55	2500188	103.43	30	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLCCVS
Data File Name	029LCCV.d
Data Path Name	D:\Data\Experiments\022117A6.b
Acq Date Time	2017-02-21T13:45:12-08:00
Sample Type	LLCCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	0.042	12.892	251	12.58	0.04	104	
Ni	60	He	0.383	4.546	622	4.09	0.4	96	
Ni	62	He	0.299	14.083	93	10.71	0.4	75	
Cu	63	He	0.201	4.339	941	3.92	0.2	101	
Cu	65	He	0.234	7.366	548	7.44	0.2	117	
Zn	66	He	0.830	10.065	611	7.33	1	83	
As	75	He	1.120	11.336	334	11.13	1	112	
Se	77	H2	2.521	9.123	1144	2.74	2	126	
Se	78	H2	2.132	6.026	1121	5.18	2	107	
~~Sb~~	~~121~~	~~He~~	~~0.142~~	~~5.137~~	~~422~~	~~4.15~~	~~0.1~~	~~142~~	
~~Sb~~	~~123~~	~~He~~	~~0.151~~	~~6.953~~	~~350~~	~~4.12~~	~~0.1~~	~~151~~	~~LLCCV Failed~~
[Pb]	206	He	0.109	2.514	677	2.26	0.1	109	
[Pb]	207	He	0.098	9.606	538	9.32	0.1	98	
Pb	208	He	0.105	5.213	2665	3.84	0.1	105	

See Review Sheet
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QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	2619165	0.52	2646568	98.96	30	120	
Sc	45	No Gas	7170349	0.43	7109800	100.85	30	120	
Ge	72	He	92586	0.92	90364	102.46	30	120	
Ge	72	H2	1025791	0.84	1014499	101.11	30	120	
In	115	He	874609	0.84	857220	102.03	30	120	
Lu	175	He	2560405	1.11	2500188	102.41	30	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLCCVS
Data File Name	030LCCV.d
Data Path Name	D:\Data\Experiments\022117A6.b
Acq Date Time	2017-02-21T13:48:39-08:00
Sample Type	LLCCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

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QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	0.042	7.575	250	7.73	0.04	104	
Ni	60	He	0.373	4.733	608	4.98	0.4	93	
Ni	62	He	0.289	53.405	91	38.08	0.4	72	
Cu	63	He	0.194	4.103	910	2.64	0.2	97	
Cu	65	He	0.183	15.457	440	14.79	0.2	91	
Zn	66	He	0.845	18.321	619	14.09	1	85	
As	75	He	1.177	4.863	350	5.86	1	118	
Se	77	H2	2.224	6.441	1088	2.40	2	111	
Se	78	H2	2.112	4.023	1104	2.97	2	106	
Sb	121	He	0.152	20.713	439	14.23	0.1	152	LLCCV Failed
Sb	123	He	0.125	9.134	306	5.37	0.1	125	
[Pb]	206	He	0.096	1.495	602	1.78	0.1	96	
[Pb]	207	He	0.100	6.404	550	6.30	0.1	100	
Pb	208	He	0.098	3.857	2482	4.01	0.1	98	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	2607152	1.91	2646568	98.51	30	120	
Sc	45	No Gas	7140935	1.23	7109800	100.44	30	120	
Ge	72	He	92479	1.41	90364	102.34	30	120	
Ge	72	H2	1019381	1.12	1014499	100.48	30	120	
In	115	He	867413	0.57	857220	101.19	30	120	
Lu	175	He	2564407	0.40	2500188	102.57	30	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLCCVS
Data File Name	031LCCV.d
Data Path Name	D:\Data\Experiments\022117A6.b
Acq Date Time	2017-02-21T13:52:07-08:00
Sample Type	LLCCV
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

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QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	0.039	9.538	234	8.51	0.04	97	
Ni	60	He	0.399	2.802	638	2.41	0.4	100	
Ni	62	He	0.381	41.842	110	31.64	0.4	95	
Cu	63	He	0.207	9.710	952	8.72	0.2	103	
Cu	65	He	0.216	15.991	503	14.52	0.2	108	
Zn	66	He	0.871	16.000	628	13.16	1	87	
As	75	He	1.018	8.449	301	7.77	1	102	
Se	77	H2	2.147	11.401	1067	4.02	2	107	
Se	78	H2	2.008	5.304	1042	5.44	2	100	
Sb	121	He	0.146	11.236	421	7.43	0.1	146	
Sb	123	He	0.145	7.350	333	5.29	0.1	145	LLCCV Failed
[Pb]	206	He	0.114	10.116	707	9.10	0.1	114	
[Pb]	207	He	0.105	10.827	577	9.88	0.1	105	
Pb	208	He	0.106	4.617	2677	4.00	0.1	106	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	2568580	2.17	2646568	97.05	30	120	
Sc	45	No Gas	7139579	0.50	7109800	100.42	30	120	
Ge	72	He	91483	0.47	90364	101.24	30	120	
Ge	72	H2	1011947	0.25	1014499	99.75	30	120	
In	115	He	856532	0.62	857220	99.92	30	120	
Lu	175	He	2560558	0.62	2500188	102.41	30	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLCCVS 2X
Data File Name	032_QC1.d
Data Path Name	D:\Data\Experiments\022117A6.b
Acq Date Time	2017-02-21T13:55:57-08:00
Sample Type	QC1
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

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QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	0.084	6.757	485	8.01	0.08	105	
Ni	60	He	0.843	2.098	1272	1.60	0.8	105	
Ni	62	He	0.843	28.820	211	24.48	0.8	105	
Cu	63	He	0.433	9.640	1895	8.49	0.4	108	
Cu	65	He	0.455	1.685	1001	0.84	0.4	114	
Zn	66	He	1.778	7.240	1149	5.66	2	89	
As	75	He	2.166	3.730	630	3.99	2	108	
Se	77	H2	4.454	9.441	1460	4.78	4	111	
Se	78	H2	4.202	1.484	2190	1.56	4	105	
Sb	121	He	0.268	14.172	655	10.45	0.2	134	
Sb	123	He	0.277	12.661	539	10.60	0.2	138	QC1 Main CR1 Failed
[Pb]	206	He	0.204	5.421	1233	5.22	0.2	102	
[Pb]	207	He	0.204	7.058	1093	6.89	0.2	102	
Pb	208	He	0.206	1.297	5057	1.24	0.2	103	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	2586768	2.27	2646568	97.74	30	120	
Sc	45	No Gas	7060571	2.35	7109800	99.31	30	120	
Ge	72	He	91753	0.76	90364	101.54	30	120	
Ge	72	H2	1018724	0.42	1014499	100.42	30	120	
In	115	He	859970	0.72	857220	100.32	30	120	
Lu	175	He	2551902	0.10	2500188	102.07	30	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLCCVS 2X
Data File Name	033_QC1.d
Data Path Name	D:\Data\Experiments\022117A6.b
Acq Date Time	2017-02-21T13:59:27-08:00
Sample Type	QC1
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

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QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	0.084	9.326	493	10.76	0.08	105	
Ni	60	He	0.911	6.674	1347	5.24	0.8	114	
Ni	62	He	1.043	7.577	251	6.81	0.8	130	
Cu	63	He	0.421	2.027	1817	3.14	0.4	105	
Cu	65	He	0.445	2.532	967	2.82	0.4	111	
Zn	66	He	1.896	2.508	1199	3.52	2	95	
As	75	He	2.150	3.550	616	2.96	2	108	
Se	77	H2	4.213	4.738	1409	1.82	4	105	
Se	78	H2	4.322	2.228	2236	2.44	4	108	
Sb	121	He	0.243	6.312	604	5.32	0.2	122	
Sb	123	He	0.276	9.983	533	8.10	0.2	138	QC1 Main CR1 Failed
[Pb]	206	He	0.210	7.629	1263	8.75	0.2	105	
[Pb]	207	He	0.201	4.126	1078	5.67	0.2	100	
Pb	208	He	0.198	0.410	4876	2.16	0.2	99	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	2566512	3.30	2646568	96.98	30	120	
Sc	45	No Gas	7161089	2.89	7109800	100.72	30	120	
Ge	72	He	90356	1.29	90364	99.99	30	120	
Ge	72	H2	1010888	0.53	1014499	99.64	30	120	
In	115	He	852654	0.68	857220	99.47	30	120	
Lu	175	He	2549599	1.80	2500188	101.98	30	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLCCVS 2X
Data File Name	034_QC1.d
Data Path Name	D:\Data\Experiments\022117A6.b
Acq Date Time	2017-02-21T14:02:54-08:00
Sample Type	QC1
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

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QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	0.085	2.829	489	1.60	0.08	106	
Ni	60	He	0.855	4.431	1274	3.67	0.8	107	
Ni	62	He	1.005	25.355	243	21.09	0.8	126	
Cu	63	He	0.437	6.553	1888	4.47	0.4	109	
Cu	65	He	0.462	3.830	1006	3.93	0.4	115	
Zn	66	He	1.847	6.574	1176	5.26	2	92	
As	75	He	2.113	8.582	608	6.84	2	106	
Se	77	H2	4.369	3.856	1437	1.92	4	109	
Se	78	H2	4.183	1.483	2167	1.19	4	105	
Sb	121	He	0.258	3.959	633	2.75	0.2	129	
Sb	123	He	0.272	10.252	530	7.86	0.2	136	QC1 Main CR1 Failed
[Pb]	206	He	0.196	4.164	1173	4.10	0.2	98	
[Pb]	207	He	0.214	7.474	1138	7.96	0.2	107	
Pb	208	He	0.203	3.098	4941	3.72	0.2	101	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	2539143	1.85	2646568	95.94	30	120	
Sc	45	No Gas	7079064	2.47	7109800	99.57	30	120	
Ge	72	He	90747	1.87	90364	100.42	30	120	
Ge	72	H2	1012488	0.29	1014499	99.80	30	120	
In	115	He	856441	0.32	857220	99.91	30	120	
Lu	175	He	2529449	1.73	2500188	101.17	30	120	

Prep Blank (PB) Report

Sample Table

Sample Name	KQ1701768-01
Data File Name	035_PB.d
Data Path Name	D:\Data\Experiments\022117A6.b
Acq Date Time	2017-02-21T14:06:21-08:00
Sample Type	PB
Dilution	1
Comment	5
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	0.002	95.6	24	43.5	0.04	
Ni	60	He	0.110	26.2	230	17.6	0.2	
Ni	62	He	0.137	13.1	58	6.7	0.2	
Cu	63	He	0.024	28.2	201	14.9	0.2	
Cu	65	He	0.007	102.7	70	20.8	0.2	
Zn	66	He	0.262	26.0	283	13.9	1	
As	75	He	-0.002	-845.3	11	51.6	0.25	
Se	77	H2	0.232	15.4	756	1.0	2	
Se	78	H2	0.025	51.5	18	37.7	0.5	
Sb	121	He	-0.015	-88.0	119	21.5	0.1	
Sb	123	He	-0.015	-59.5	86	17.3	0.05	
[Pb]	206	He	0.011	59.7	104	36.9	0.1	
[Pb]	207	He	0.011	19.3	84	14.9	0.1	
Pb	208	He	0.011	30.7	397	19.5	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	2628868	2.30	2646568	99.33	30	120	
Sc	45	No Gas	7164523	1.87	7109800	100.77	30	120	
Ge	72	He	92950	0.51	90364	102.86	30	120	
Ge	72	H2	1021929	0.61	1014499	100.73	30	120	
In	115	He	873369	0.82	857220	101.88	30	120	
Lu	175	He	2575173	1.34	2500188	103.00	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	KQ1701768-02
Data File Name	036_LCS.d
Data Path Name	D:\Data\Experiments\022117A6.b
Acq Date Time	2017-02-21T14:09:49-08:00
Sample Type	LCS
Dilution	1
Comment	20
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	4.881	2.750	27228	1.91	5	97.6	
Ni	60	He	48.688	1.7S8	69707	1.24	50	97.4	
Ni	62	He	49.913	1.491	10988	1.68	50	99.8	
Cu	63	He	24.363	0.847	101608	0.87	25	97.5	
Cu	65	He	24.643	1.152	51548	1.29	25	98.6	
Zn	66	He	43.910	0.708	25411	0.96	50	87.8	
As	75	He	49.676	1.423	14264	0.98	50	99.4	
Se	77	H2	50.307	0.262	9164	0.61	50	100.6	
Se	78	H2	50.465	1.292	26344	1.03	50	100.9	
Sb	121	He	47.944	1.416	88497	0.53	50	95.9	
Sb	123	He	48.540	0.532	73066	0.99	50	97.1	
[Pb]	206	He	49.406	0.274	283139	1.11	50	98.8	
[Pb]	207	He	50.763	1.323	261442	1.14	50	101.5	
Pb	208	He	50.253	0.877	1178219	0.18	50	100.5	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	2498524	2.35	2646568	94.41	30	120	
Sc	45	No Gas	7000040	1.74	7109800	98.46	30	120	
Ge	72	He	92120	0.52	90364	101.94	30	120	
Ge	72	H2	1022070	0.37	1014499	100.75	30	120	
In	115	He	831523	0.90	857220	97.00	30	120	
Lu	175	He	2502261	0.84	2500188	100.08	30	120	

All Reference Sample Report

Sample Table

Sample Name	K1615155-008
Data File Name	037_ARF.d
Data Path Name	D:\Data\Experiments\022117A6.b
Acq Date Time	2017-02-21T14:13:16-08:00
Sample Type	AllRef
Dilution	1
Comment	5
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	0.004	30.38	35	0.01	
Ni	60	He	0.476	8.44	760	0.06	
Ni	62	He	0.503	29.80	139	0.36	
Cu	63	He	3.608	3.90	15279	0.02	
Cu	65	He	3.612	2.34	7678	0.05	
Zn	66	He	9.222	4.72	5494	0.17	
As	75	He	0.020	77.53	17	0.12	
Se	77	H2	-0.042	-282.21	701	-0.01	
Se	78	H2	0.061	9.23	36	0.17	
Sb	121	He	0.062	6.23	263	0.02	
Sb	123	He	0.073	11.36	222	0.03	
[Pb]	206	He	0.132	7.10	799	0.02	
[Pb]	207	He	0.124	9.72	668	0.02	
Pb	208	He	0.125	3.75	3091	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	2648983	1.70	2646568	100.09	30	120	
Sc	45	No Gas	7046625	0.94	7109800	99.11	30	120	
Ge	72	He	93029	0.48	90364	102.95	30	120	
Ge	72	H2	1009160	1.33	1014499	99.47	30	120	
In	115	He	861791	0.79	857220	100.53	30	120	
Lu	175	He	2521334	1.68	2500188	100.85	30	120	

Sample Report

Sample Table

Sample Name	K1615155-008D
Data File Name	038SMPL.d
Data Path Name	D:\Data\Experiments\022117A6.b
Acq Date Time	2017-02-21T14:16:43-08:00
Sample Type	Sample
Dilution	1
Comment	S
ISTD Ref FileName	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Be	9	No Gas	0.003	85.12	28	0.01	
Ni	60	He	0.375	22.56	610	0.06	
Ni	62	He	0.270	30.70	87	0.31	
Cu	63	He	3.755	2.17	15818	0.02	
Cu	65	He	3.631	2.58	7680	0.05	
Zn	66	He	11.680	1.48	6888	0.17	
As	75	He	0.011	198.90	14	0.07	
Se	77	H2	0.143	97.08	736	0.02	
Se	78	H2	0.056	27.97	34	0.17	
Sb	121	He	0.088	14.19	316	0.03	
Sb	123	He	0.069	6.69	218	0.03	
[Pb]	206	He	0.120	1.39	746	0.02	
[Pb]	207	He	0.112	7.39	617	0.02	
Pb	208	He	0.115	4.24	2925	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	2665649	1.15	2646568	100.72	30	120	
Sc	45	No Gas	7041095	1.91	7109800	99.03	30	120	
Ge	72	He	92565	0.78	90364	102.44	30	120	
Ge	72	H2	1015514	1.27	1014499	100.10	30	120	
In	115	He	869145	0.88	857220	101.39	30	120	
Lu	175	He	2576767	0.51	2500188	103.06	30	120	

Matrix Spike Sample (MS) Report

Sample Table

Sample Name	K1615155-008S
Data File Name	039_Spk.d
Data Path Name	D:\Data\Experiments\022117A6.b
Acq Date Time	2017-02-21T14:20:11-08:00
Sample Type	Spike
Dilution	1
Comment	5
QC Ref File Name	037_ARF.d
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Spk Amt	%Rec	QC Flag
Be	9	No Gas	20.493	0.733	114027	0.71	20	102	
Ni	60	He	203.252	0.756	287210	0.40	200	101	
Ni	62	He	207.061	2.007	44935	1.47	200	103	
Cu	63	He	106.699	0.473	439216	0.24	100	103	
Cu	65	He	106.877	1.001	220631	0.59	100	103	
Zn	66	He	195.337	1.740	111205	1.31	200	93	
As	75	He	205.687	1.231	58303	1.22	200	103	
Se	77	H2	216.064	1.548	36062	0.90	200	108	
Se	78	H2	217.259	1.038	110544	0.46	200	109	
Sb	121	He	191.031	0.339	356858	0.70	200	95	
Sb	123	He	192.849	0.315	293794	0.72	200	96	
[Pb]	206	He	200.616	1.421	1159592	1.33	200	100	
[Pb]	207	He	206.160	0.714	1071016	0.88	200	103	
Pb	208	He	209.179	1.230	4946820	0.82	200	105	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	2593692	3.51	2646568	98.00	30	120	
Sc	45	No Gas	6983937	0.09	7109800	98.23	30	120	
Ge	72	He	90989	0.60	90364	100.69	30	120	
Ge	72	H2	996365	0.64	1014499	98.21	30	120	
In	115	He	842457	0.45	857220	98.28	30	120	
Lu	175	He	2524148	0.73	2500188	100.96	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	040_CCV.d
Data Path Name	D:\Data\Experiments\022117A6.b
Acq Date Time	2017-02-21T14:23:37-08:00
Sample Type	CCV
Dilution	1
Comment	5
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Be	9	No Gas	24.758	1.728	135154	0.80	25	99	
Ni	60	He	25.384	3.302	35455	1.50	25	102	
Ni	62	He	25.423	5.118	5466	3.26	25	102	
Cu	63	He	25.218	2.709	102520	1.53	25	101	
Cu	65	He	25.022	0.859	51028	1.06	25	100	
Zn	66	He	25.121	1.061	14228	1.79	25	100	
As	75	He	25.749	1.648	7214	1.51	25	103	
Se	77	H2	25.653	2.604	4919	1.49	25	103	
Se	78	H2	25.641	1.892	13109	2.20	25	103	
Sb	121	He	24.961	0.499	46175	0.49	25	100	
Sb	123	He	25.387	0.379	38291	0.97	25	102	
[Pb]	206	He	25.227	1.604	143144	0.33	25	101	
[Pb]	207	He	24.893	2.133	126935	0.65	25	100	
Pb	208	He	25.066	1.798	581902	0.52	25	100	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	2511107	3.07	2646568	94.88	30	120	
Sc	45	No Gas	6853936	2.49	7109800	96.40	30	120	
Ge	72	He	89819	1.83	90364	99.40	30	120	
Ge	72	H2	1000762	0.75	1014499	98.65	30	120	
In	115	He	832094	0.79	857220	97.07	30	120	
Lu	175	He	2477653	1.49	2500188	99.10	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	041_CCB.d
Data Path Name	D:\Data\Experiments\022117A6.b
Acq Date Time	2017-02-21T14:27:04-08:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	003CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	No Gas	0.006	5.0	45	5.2	0.04	
Ni	60	He	0.013	241.4	87	50.4	0.2	
Ni	62	He	0.008	103.9	28	6.9	0.2	
Cu	63	He	0.012	36.2	141	13.0	0.2	
Cu	65	He	0.016	79.0	86	29.5	0.2	
Zn	66	He	0.176	10.4	222	4.6	1	
As	75	He	0.015	123.4	15	35.3	0.25	
Se	77	H2	0.374	79.0	747	5.9	20	
Se	78	H2	0.054	22.8	32	20.5	0.5	
Sb	121	He	0.036	26.2	208	7.2	0.2	
Sb	123	He	0.035	68.9	158	22.5	0.05	
[Pb]	206	He	0.009	16.3	89	9.4	0.1	
[Pb]	207	He	0.012	58.6	84	41.8	0.1	
Pb	208	He	0.012	15.7	407	10.1	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	No Gas	2529965	2.33	2646568	95.59	30	120	
Sc	45	No Gas	6928283	1.84	7109800	97.45	30	120	
Ge	72	He	88511	0.94	90364	97.95	30	120	
Ge	72	H2	979658	0.99	1014499	96.57	30	120	
In	115	He	838571	1.16	857220	97.82	30	120	
Lu	175	He	2508730	0.79	2500188	100.34	30	120	

Service Request # K1700916(Sb), K1701359

Instrument ID # K-ICP-MS-05
Calibration 022217AMS05
ALS LIMS Run # 535579

Cal Std: MS21-49-B
ICV Std: MS21-48-M
LLICV Std: MS21-45I
I.S. Solution: MS20-34-B

ICSA Std: MS21-47-J
ICSAB Std: MS21-47-K

ICP-MS Data Review Form

	Yes	No	NA
1. Appropriate standardization completed	X		
2. ICV in control (+/- 10%)	X		
3. CCV's in control (+/- 10%)	X		
4. ICB/CCB's below MRL	X		
5. LLICV standard analyzed and in control	X		
6. ICS standards within 20% of true value	X		
6. All analytes within instrument linear range	X		
7. Adequate rinse out time allowed	X		
8. Internal standards in control	X		
9. Interferences checked	X		
10. Was the run terminated? If so, why.		X	

See Benchsheet exception report for sample batch QC information.

Comments: K1701359: Use Pb MRL=1.0 ppb=0.5 mg/Kg.
Use Cu MRL 2X.

Primary Review by [redacted] Date 2/22/17
Secondary Review by Date 2/23/17

Data Review Form

Service Request #:	**K1700916**
Instrument ID#:	**K-ICP-MS-05**
DataFile Name:	**R:\ICP\WIP\DATA\K-ICP-MS-05 (Agilent)\022217A.csv**
RUNNO:	**535579**

K1700916-001MS - Metals T

MS Recovery

6020A/Metals T - 123 Sb [He] - Recovery: 59 Limits: 72 - 124

PDS is in control

K1700916-001DMS - Metals T

DMS Recovery

6020A/Metals T - 123 Sb [He] - Recovery: 62 Limits: 72 - 124

Analytical Method 6020A

Primary Approver: [redacted] 2/23/17

Secondary Approver: [redacted] 2/23/17

Data Review Form

Service Request #: **K1701359**
Instrument ID#: **K-ICP-MS-05**
DataFile Name: **R:\ICP\WIP\DATA\K-ICP-MS-05 (Agilent)\022217A.csv**
RUNNO: **535579**

K1701359-001MS - Metals T
MS Recovery
6020A/Metals T - 123 Sb [He] - Recovery: 32 Limits: 72 - 124
6020A/Metals T - 208 Pb [He] - Recovery: 122 Limits: 84 - 118

K1701359-001DMS - Metals T
DMS Recovery
6020A/Metals T - 123 Sb [He] - Recovery: 31 Limits: 72 - 124
6020A/Metals T - 208 Pb [He] - Recovery: 124 Limits: 84 - 118

Reprep + FINC
PDS is in control
on sample > 4X
MS Level

K1701359-021MS - Metals T
MS Recovery
6020A/Metals T - 65 Cu [He] - Recovery: 79 Limits: 84 - 119
6020A/Metals T - 123 Sb [He] - Recovery: 31 Limits: 72 - 124

K1701359-021DMS - Metals T
DMS Recovery
6020A/Metals T - 65 Cu [He] - Recovery: 195 Limits: 84 - 119
6020A/Metals T - 123 Sb [He] - Recovery: 31 Limits: 72 - 124

K1701359-021MS - Metals T
MS Recovery
6020A/Metals T - 208 Pb [He] - Recovery: 157 Limits: 84 - 118

K1701359-021DMS - Metals T
DMS Recovery
6020A/Metals T - 208 Pb [He] - Recovery: 158 Limits: 84 - 118

Analytical Method 6020A

Primary Approver: [redacted] 2/23/18
Secondary Approver: [redacted] 2/24/18

	Sample						
		Rjct	Data File	Acq. Date-Time	Type	Sample Name	Comment
1			001CALB.	2/22/2017 8:12:24 AM	CalBlk	Blank	
2			002CALB.	2/22/2017 8:16:02 AM	CalBlk	Blank	
3			003CALB.	2/22/2017 8:19:41 AM	CalBlk	Blank	
4			004CALB.	2/22/2017 8:22:36 AM	CalBlk	Blank	
5			005CALB.	2/22/2017 8:25:31 AM	CalBlk	Prime	
6			006CALB.	2/22/2017 8:29:56 AM	CalBlk	Blank	
7			007CALB.	2/22/2017 8:32:50 AM	CalBlk	Blank	
8			008CALS.	2/22/2017 8:35:46 AM	CalStd	25ppb	
9			009_ICV.d	2/22/2017 8:38:42 AM	ICV	ICV	
10			010_CCV.	2/22/2017 8:41:38 AM	CCV	CCV	
11			011_ICB.d	2/22/2017 8:44:34 AM	ICB	ICB	
12			012_CCB.	2/22/2017 8:47:30 AM	CCB	CCB	
13			013LICV.d	2/22/2017 8:50:25 AM	LLICV	LLICVS	
14			014SMPL.	2/22/2017 8:53:21 AM	Sample	LRSTD	
15			015ICSA.d	2/22/2017 8:56:17 AM	ICSA	ICSA	
16			016ICSB.d	2/22/2017 8:59:24 AM	ICSB	ICSAB	
17			017SMPL.	2/22/2017 9:02:19 AM	Sample	LRSTD	
18			018_PB.d	2/22/2017 9:05:14 AM	PB	KQ1701710-01	5
19			019_PB.d	2/22/2017 9:08:30 AM	PB	KQ1701710-01	5
20			020_LCS.d	2/22/2017 9:11:25 AM	LCS	KQ1701710-02	20
21			021_ARF.d	2/22/2017 9:14:21 AM	AllRef	K1700916-001	5
22			022SMPL.	2/22/2017 9:17:16 AM	Sample	K1700916-001L	25
23			023_PDS.d	2/22/2017 9:20:11 AM	PDS	K1700916-001A	5
24			024_Spk.d	2/22/2017 9:23:06 AM	Spike	K1700916-001S	5
25			025_Spk.d	2/22/2017 9:26:02 AM	Spike	K1700916-001S	5
26			026SMPL.	2/22/2017 9:28:59 AM	Sample	K1700916-002	5
27			027SMPL.	2/22/2017 9:31:54 AM	Sample	K1700916-004	5
28			028_CCV.	2/22/2017 9:35:38 AM	CCV	CCV	
29			029_CCB.	2/22/2017 9:38:33 AM	CCB	CCB	
30			030SMPL.	2/22/2017 9:41:28 AM	Sample	K1700916-003	5
31			031_CCV.	2/22/2017 9:44:23 AM	CCV	CCV	
32			032_CCB.	2/22/2017 9:47:19 AM	CCB	CCB	
33			033LCCV.	2/22/2017 9:50:14 AM	LLCCV	LLCCVS	
34			034_PB.d	2/22/2017 9:53:09 AM	PB	KQ1701570-01	5
35			035_LCS.d	2/22/2017 9:56:04 AM	LCS	KQ1701570-05	20

	Sample						
		Rjct	Data File	Acq. Date-Time	Type	Sample Name	Comment
36			036_ARF.d	2/22/2017 9:59:01 AM	AllRef	K1701359-001	5
37			037SMPL.	2/22/2017 10:01:56 AM	Sample	K1701359-001L	25
38			038_PDS.d	2/22/2017 10:04:51 AM	PDS	K1701359-001A	5
39			039_Spk.d	2/22/2017 10:07:46 AM	Spike	K1701359-001S	5
40			040_Spk.d	2/22/2017 10:10:41 AM	Spike	K1701359-001S	5
41			041SMPL.	2/22/2017 10:13:36 AM	Sample	K1701359-002	5
42			042SMPL.	2/22/2017 10:16:32 AM	Sample	K1701359-003	5
43			043SMPL.	2/22/2017 10:19:27 AM	Sample	K1701359-004	5
44			044_CCV.	2/22/2017 10:22:22 AM	CCV	CCV	
45			045_CCB.	2/22/2017 10:25:17 AM	CCB	CCB	
46			046SMPL.	2/22/2017 10:28:12 AM	Sample	K1701359-005	5
47			047SMPL.	2/22/2017 10:31:07 AM	Sample	K1701359-006	5
48			048SMPL.	2/22/2017 10:34:03 AM	Sample	K1701359-007	5
49			049SMPL.	2/22/2017 10:36:57 AM	Sample	K1701359-008	5
50			050SMPL.	2/22/2017 10:39:52 AM	Sample	K1701359-009	5
51			051SMPL.	2/22/2017 10:42:47 AM	Sample	K1701359-010	5
52			052SMPL.	2/22/2017 10:45:42 AM	Sample	K1701359-011	5
53			053SMPL.	2/22/2017 10:48:37 AM	Sample	K1701359-012	5
54			054SMPL.	2/22/2017 10:51:32 AM	Sample	K1701359-013	5
55			055SMPL.	2/22/2017 10:54:28 AM	Sample	K1701359-014	5
56			056_CCV.	2/22/2017 10:57:56 AM	CCV	CCV	
57			057_CCB.	2/22/2017 11:02:04 AM	CCB	CCB	
58			058_CCB.	2/22/2017 11:04:59 AM	CCB	CCB	
59			059_CCB.	2/22/2017 11:08:15 AM	CCB	CCB	
60			060SMPL.	2/22/2017 11:11:10 AM	Sample	K1701359-015	5
61			061SMPL.	2/22/2017 11:14:05 AM	Sample	K1701359-016	5
62			062SMPL.	2/22/2017 11:24:19 AM	Sample	K1701359-017	5
63			063SMPL.	2/22/2017 11:27:15 AM	Sample	K1701359-018	5
64			064SMPL.	2/22/2017 11:31:10 AM	Sample	K1701359-019	5
65			065SMPL.	2/22/2017 11:36:51 AM	Sample	K1701359-020	5
66			066_CCV.	2/22/2017 11:40:47 AM	CCV	CCV	
67			067_CCB.	2/22/2017 11:44:41 AM	CCB	CCB	
68			070_CCB.	2/22/2017 11:59:18 AM	CCB	CCB	
69			071LCCV.	2/22/2017 12:03:40 PM	LLCCV	LLCCVS	
70			072LCCV.	2/22/2017 12:09:04 PM	LLCCV	LLCCVS	

	Sample						
		Rjct	Data File	Acq. Date-Time	Type	Sample Name	Comment
71			073LCCV.	2/22/2017 12:12:58 PM	LLCCV	LLCCVS	
72			074_QC1.d	2/22/2017 12:16:53 PM	QC1	LLCCVS 2X	
73			075_QC1.d	2/22/2017 12:20:48 PM	QC1	LLCCVS 2X	
74			076_QC1.d	2/22/2017 12:25:40 PM	QC1	LLCCVS 2X	
75			077SMPL.	2/22/2017 12:29:36 PM	Sample	LLCCVS 1.0 ppb	
76			078SMPL.	2/22/2017 12:33:30 PM	Sample	LLCCVS 1.0 ppb	
77			079_PB.d	2/22/2017 12:37:26 PM	PB	KQ1701586-01	5
78			080_LCS.d	2/22/2017 12:42:04 PM	LCS	KQ1701586-02	20
79			081_ARF.d	2/22/2017 12:45:59 PM	AllRef	K1701359-021	5
80			082SMPL.	2/22/2017 12:53:30 PM	Sample	K1701359-021L	25
81			083_PDS.d	2/22/2017 12:57:24 PM	PDS	K1701359-021A	5
82			084SMPL.	2/22/2017 1:01:20 PM	Sample	K1701359-021S	5
83			085SMPL.	2/22/2017 1:05:14 PM	Sample	K1701359-021S	5
84			086_CCV.	2/22/2017 1:09:10 PM	CCV	CCV	
85			087_CCB.	2/22/2017 1:13:04 PM	CCB	CCB	
86			088LCCV.	2/22/2017 1:17:07 PM	LLCCV	LLCCVS	
87			089_QC1.d	2/22/2017 1:22:30 PM	QC1	LLCCVS 2X	
88			090SMPL.	2/22/2017 1:25:40 PM	Sample	LLCCVS 1.0 ppb	
89			091SMPL.	2/22/2017 1:28:51 PM	Sample	K1701359-010	500
90			092SMPL.	2/22/2017 1:32:02 PM	Sample	K1701359-011	500
91			093SMPL.	2/22/2017 1:35:13 PM	Sample	K1701359-013	500
92			094SMPL.	2/22/2017 1:38:24 PM	Sample	K1701359-014	500
93			095SMPL.	2/22/2017 1:41:34 PM	Sample	K1701359-015	500
94			096SMPL.	2/22/2017 1:44:45 PM	Sample	K1701359-016	5000
95			097SMPL.	2/22/2017 1:47:54 PM	Sample	K1701359-017	500
96			098SMPL.	2/22/2017 1:51:05 PM	Sample	K1701359-018	500
97			099_CCV.	2/22/2017 1:54:16 PM	CCV	CCV	
98			100_CCB.	2/22/2017 1:57:26 PM	CCB	CCB	
99			101SMPL.	2/22/2017 2:00:36 PM	Sample	K1701359-021	50
100			102SMPL.	2/22/2017 2:03:49 PM	Sample	K1701359-021S	50
101			103SMPL.	2/22/2017 2:07:00 PM	Sample	K1701359-021S	50
102			104_CCV.	2/22/2017 2:10:10 PM	CCV	CCV	
103			105_CCB.	2/22/2017 2:13:21 PM	CCB	CCB	
104			106_QC1.d	2/22/2017 2:16:31 PM	QC1	LLCCVS 2X	
105			107_QC1.d	2/22/2017 2:19:40 PM	QC1	LLCCVS 2X	

Sample

	Rjct	Data File	Acq. Date-Time	Type	Sample Name	Comment
106		108SMPL.	2/22/2017 2:22:50 PM	Sample	LLCCVS 1.0 ppb	
107		109SMPL.	2/22/2017 2:26:00 PM	Sample	LLCCVS 1.0 ppb	

Analyte

	Name	Mass	ISTD	Tune Mode
1	Cu	63	72	He
2	Cu	65	72	He
3	Sb	121	115	He
4	Sb	123	115	He
5	[Pb]	206	175	He
6	[Pb]	207	175	He
7	Pb	208	175	He
8	Ge	72		He
9	In	115		He
10	Lu	175		He

US EPA Tune Check Sample Report

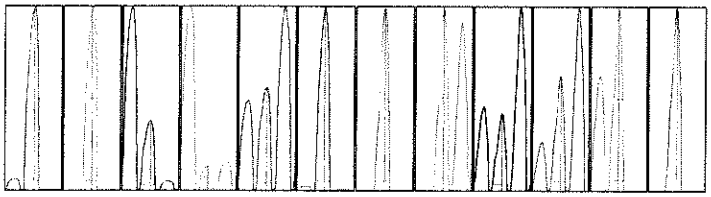
Batch Folder D:\Data\Experiments\022217A.b
Report Comment ALS Tune
Instrument Name G3281A JP13482848

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
7	113723	0.45	5.00	
9	35436	0.34	5.00	
24	147594	0.69	5.00	
25	19807	0.97	5.00	
26	22622	0.96	5.00	
59	183418	0.91	5.00	
115	259990	1.20	5.00	
206	61364	1.65	5.00	
207	56950	0.94	5.00	
208	133225	1.11	5.00	
209	209711	0.70	5.00	
238	282165	0.65	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
7	113756	113995	114384	113418	113063
9	35580	35481	35246	35426	35446
24	149341	147551	146897	147246	146933
25	19808	19925	19954	19867	19480
26	22815	22713	22643	22251	22688
59	186375	183010	182475	182492	182739
115	263249	262288	260920	257523	255972
206	63033	61469	61143	60754	60420
207	57585	56988	57333	56548	56298
208	135101	134375	132984	131975	131691
209	211780	209505	210359	209016	207897
238	283075	284954	280839	281304	280650

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
7	18985	7.05	6.9 - 7.1		0.785	0.900	
9	6217	9.00	8.9 - 9.1		0.740	0.900	
24	25085	24.00	23.9 - 24.1		0.786	0.900	
25	3368	25.00	24.9 - 25.1		0.783	0.900	
26	3850	26.00	25.9 - 26.1		0.784	0.900	
59	33550	58.95	58.9 - 59.1		0.777	0.900	
115	51926	115.00	114.9 - 115.1		0.769	0.900	
206	12290	206.00	205.9 - 206.1		0.770	0.900	
207	11297	207.00	206.9 - 207.1		0.778	0.900	
208	26817	208.00	207.9 - 208.1		0.776	0.900	
209	42754	209.00	208.9 - 209.1		0.773	0.900	
238	54896	238.00	237.9 - 238.1		0.792	0.900	

X% = 5 **Integration Time [sec] =** 0.1 **Acquisition Time [sec] =** 279 **Y Axis =** Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.57	L/min			
RF Matching	1.76	V	Option Gas	0.0	%			
Smpl Depth	8.0	mm	Nebulizer Pump	0.10	rps			
S/C Temp	2	°C						

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	8.3	V			
Extract 2	-135.0	V	Cell Entrance	-30	V			
Omega Bias	-70	V	Cell Exit	-50	V			
Deflect	13.0	V						

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	false		3rd Gas Flow	0	%			
He Flow	0.0	mL/min	OctP Bias	-8.0	V			
H2 Flow	0.0	mL/min	OctP RF	180	V			
Energy Discrimination	5.0	V						

Calibration Blank Report

Sample Table

Sample Name	Blank
Data File Name	007CALB.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T08:32:50-08:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	Tune Mode	CPS	%RSD
Cu	63	He	151	2.23
Cu	65	He	66	19.51
Sb	121	He	67	15.35
Sb	123	He	48	51.44
[Pb]	206	He	33	210.00
[Pb]	207	He	19	235.13
Pb	208	He	116	19.39

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD
Ge	72	He	78682	1.94
In	115	He	701170	0.44
Lu	175	He	2054624	3.16

Calibration Standard Report

Sample Table

Sample Name	25ppb
Data File Name	008CALS.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T08:35:46-08:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	CPS	%RSD
Cu	63	He	93664	0.00
Cu	65	He	46856	0.00
Sb	121	He	39597	0.00
Sb	123	He	32374	0.00
[Pb]	206	He	118067	0.00
[Pb]	207	He	105468	0.00
Pb	208	He	484021	0.00

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	79035	0.92	78682	100.45	30	120	
In	115	He	700604	0.25	701170	99.92	30	120	
Lu	175	He	2031025	0.81	2054624	98.85	30	120	

Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICV
Data File Name	009_ICV.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T08:38:42-08:00
Sample Type	ICV
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Cu	63	He	12.611	1.395	47827	1.35	12.5	101	
Cu	65	He	12.374	1.806	23473	1.71	12.5	99	
Sb	121	He	25.690	0.851	41033	0.48	25	103	
Sb	123	He	25.133	2.008	32822	2.01	25	101	
[Pb]	206	He	24.798	1.307	118003	0.95	25	99	
[Pb]	207	He	25.872	2.017	109972	1.75	25	103	
Pb	208	He	25.236	1.134	492308	0.64	25	101	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	79873	0.18	78682	101.51	30	120	
In	115	He	706538	0.38	701170	100.77	30	120	
Lu	175	He	2046554	1.19	2054624	99.61	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	010_CCV.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T08:41:38-08:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Cu	63	He	25.096	0.602	94051	0.72	25	100	
Cu	65	He	24.951	0.397	46780	1.27	25	100	
Sb	121	He	25.332	0.880	39604	0.79	25	101	
Sb	123	He	25.215	0.917	32230	0.96	25	101	
[Pb]	206	He	25.267	3.346	118106	1.22	25	101	
[Pb]	207	He	25.117	3.159	104883	1.28	25	100	
Pb	208	He	25.120	2.522	481427	0.37	25	100	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	79060	1.20	78682	100.48	30	120	
In	115	He	691552	0.12	701170	98.63	30	120	
Lu	175	He	2011177	2.24	2054624	97.89	30	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB
Data File Name	011_ICB.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T08:44:34-08:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Cu	63	He	-0.005	-134.5	134	17.4	0.2	
Cu	65	He	-0.009	-217.0	49	75.1	0.2	
Sb	121	He	0.002	312.7	72	16.3	0.2	
Sb	123	He	0.018	20.1	72	6.1	0.05	
[Pb]	206	He	0.003	37.2	50	13.3	0.1	
[Pb]	207	He	0.005	43.6	39	21.6	0.1	
Pb	208	He	0.003	12.0	170	5.2	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	7B723	0.71	78682	100.05	30	120	
In	115	He	707786	0.82	701170	100.94	30	120	
Lu	175	He	2058862	1.41	2054624	100.21	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	012_CCB.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T08:47:30-08:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Cu	63	He	-0.006	-108.1	131	19.1	0.2	
Cu	65	He	-0.004	-190.0	60	22.2	0.2	
Sb	121	He	0.004	159.5	74	13.1	0.2	
Sb	123	He	-0.009	-35.2	37	11.3	0.05	
[Pb]	206	He	-0.001	-376.8	31	34.4	0.1	
[Pb]	207	He	0.001	113.6	22	17.3	0.1	
Pb	208	He	0.001	107.2	138	17.0	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	80142	0.66	78682	101.86	30	120	
In	115	He	711247	0.45	701170	101.44	30	120	
Lu	175	He	2064087	0.50	2054624	100.46	30	120	

Low Level Initial Calibration Verification (LLICV) Report

Sample Table

Sample Name	LLICVS
Data File Name	013LICV.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T08:50:25-08:00
Sample Type	LLICV
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Cu	63	He	0.188	2.432	854	2.29	0.2	94	
Cu	65	He	0.183	18.717	409	16.11	0.2	91	
Sb	121	He	0.121	14.404	263	10.46	0.1	121	
Sb	123	He	0.096	12.552	176	9.56	0.1	96	
[Pb]	206	He	0.099	2.467	508	2.65	0.1	99	
[Pb]	207	He	0.099	16.438	444	16.51	0.1	99	
Pb	208	He	0.100	5.334	2088	6.10	0.1	100	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	79146	0.62	78682	100.59	30	120	
In	115	He	712779	0.57	701170	101.66	30	120	
Lu	175	He	2062792	1.24	2054624	100.40	30	120	

Sample Report

Sample Table

Sample Name	LRSTD
Data File Name	014SMPL.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T08:53:21-08:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

wrong autosampler position
2/22/17

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Cu	63	He	-0.024	-2.47	156	-0.02	
Cu	65	He	-0.016	-81.70	84	-0.02	
Sb	121	He	0.057	40.62	445	0.01	
Sb	123	He	0.059	23.69	356	0.02	
[Pb]	206	He	-0.003	-26.59	58	0.00	
[Pb]	207	He	0.001	322.04	57	0.00	
Pb	208	He	-0.002	-36.86	222	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	198499	20.03	78682	252.28	30	120	Flag
In	115	He	2036455	15.39	701170	290.44	30	120	Flag
Lu	175	He	5531340	15.99	2054624	269.21	30	120	Flag

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA
Data File Name	015ICSA.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T08:56:17-08:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	QC Flag
Cu	63	He	0.586	8.3	2248	6.3	
Cu	65	He	0.630	5.0	1196	6.2	
Sb	121	He	0.063	20.0	156	12.7	
Sb	123	He	0.060	25.1	117	14.8	
[Pb]	206	He	0.099	11.6	492	11.0	
[Pb]	207	He	0.116	5.5	497	5.2	
Pb	208	He	0.108	3.9	2150	4.0	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	75867	1.52	78682	96.42	30	120	
In	115	He	651156	0.71	701170	92.87	30	120	
Lu	175	He	1988398	0.62	2054624	96.78	30	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB
Data File Name	016ICSB.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T08:59:24-08:00
Sample Type	ICSB
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Cu	63	He	51.523	1.346	188416	0.91	50	103.0	
Cu	65	He	51.998	1.230	95136	0.79	50	104.0	
Sb	121	He	0.072	2.718	169	1.51	-1	-7.2	
Sb	123	He	0.068	25.547	127	16.17	-1	-6.8	
[Pb]	206	He	0.120	13.073	584	12.24	-1	-12.0	
[Pb]	207	He	0.135	2.349	572	2.21	-1	-13.5	
Pb	208	He	0.123	2.076	2429	1.83	-1	-12.3	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	77209	0.55	78682	98.13	30	120	
In	115	He	654382	0.30	701170	93.33	30	120	
Lu	175	He	1981829	0.91	2054624	96.46	30	120	

Sample Report

Sample Table

Sample Name	LRSTD
Data File Name	017SMPL.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T09:02:19-08:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Cu	63	He	487.430	0.64	1890396	0.03	
Cu	65	He	471.313	0.26	914650	0.05	
Sb	121	He	482.823	1.14	788210	0.06	
Sb	123	He	476.427	2.41	635949	0.07	
[Pb]	206	He	520.620	1.46	2526019	0.02	
[Pb]	207	He	512.389	2.60	2220771	0.02	
Pb	208	He	507.889	1.61	10102441	0.01	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	81941	0.95	78682	104.14	30	120	
In	115	He	723350	1.41	701170	103.16	30	120	
Lu	175	He	2087362	1.35	2054624	101.59	30	120	

Prep Blank (PB) Report

Sample Table

Sample Name	KQ1701710-01
Data File Name	018_PB.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T09:05:14-08:00
Sample Type	PB
Dilution	1
Comment	5
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

Carry over See Rerun RJ 2/22/17

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Cu	63	He	0.201	9.7	970	7.5	0.2	Flag
Cu	65	He	0.203	8.9	478	7.7	0.2	Flag
Sb	121	He	0.061	29.5	174	17.3	0.1	
Sb	123	He	0.067	21.8	144	14.1	0.05	Flag
[Pb]	206	He	0.081	7.2	444	4.6	0.1	
[Pb]	207	He	0.090	9.5	426	8.6	0.1	
Pb	208	He	0.086	2.0	1892	0.8	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	84748	1.07	78682	107.71	30	120	
In	115	He	749398	0.22	701170	106.88	30	120	
Lu	175	He	2165843	2.10	2054624	105.41	30	120	

Prep Blank (PB) Report

Sample Table

Sample Name	KQ1701710-01
Data File Name	019_PB.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T09:08:30-08:00
Sample Type	PB
Dilution	1
Comment	5
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Cu	63	He	0.132	13.5	684	9.1	0.2	
Cu	65	He	0.138	16.2	344	12.2	0.2	
Sb	121	He	0.001	253.0	73	8.2	0.1	
Sb	123	He	0.004	221.5	57	21.9	0.05	
[Pb]	206	He	0.028	55.7	176	45.3	0.1	
[Pb]	207	He	0.027	20.3	142	18.2	0.1	
Pb	208	He	0.025	8.6	646	8.0	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	83918	1.24	78682	106.65	30	120	
In	115	He	744133	1.59	701170	106.13	30	120	
Lu	175	He	2157971	1.05	2054624	105.03	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	KQ1701710-02
Data File Name	020_LCS.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T09:11:25-08:00
Sample Type	LCS
Dilution	1
Comment	20
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Cu	63	He	24.048	0.947	91812	0.87	25	96.2	
Cu	65	He	23.688	0.200	45245	0.07	25	94.8	
Sb	121	He	46.844	0.567	7S135	0.49	50	93.7	
Sb	123	He	45.864	0.567	60150	0.61	50	91.7	
[Pb]	206	He	48.010	1.508	230140	0.48	50	96.0	
[Pb]	207	He	49.517	0.612	212057	0.81	50	99.0	
Pb	208	He	48.650	1.099	956084	0.37	50	97.3	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	80533	0.18	78682	102.35	30	120	
In	115	He	710040	0.11	701170	101.26	30	120	
Lu	175	He	2061983	1.39	2054624	100.36	30	120	

All Reference Sample Report

Sample Table

Sample Name	K1700916-001
Data File Name	021_ARF.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T09:14:21-08:00
Sample Type	AllRef
Dilution	1
Comment	5
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Cu	63	He	8.542	1.98	35845	0.02	
Cu	65	He	8.606	0.98	18063	0.05	
Sb	121	He	0.122	13.30	272	0.04	
Sb	123	He	0.113	1.80	204	0.06	
[Pb]	206	He	15.626	1.33	76680	0.02	
[Pb]	207	He	13.497	0.94	59164	0.02	
Pb	208	He	14.720	0.38	296146	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	88259	0.89	78682	112.17	30	120	
In	115	He	735051	1.16	701170	104.83	30	120	
Lu	175	He	2110203	1.39	2054624	102.71	30	120	

Sample Report

Sample Table

Sample Name	K1700916-001L
Data File Name	022SMPL.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T09:17:16-08:00
Sample Type	Sample
Dilution	1
Comment	25
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Cu	63	He	1.768	4.67	7179	0.02	
Cu	65	He	1.803	2.20	3652	0.05	
Sb	121	He	0.019	17.04	101	0.02	
Sb	123	He	0.026	28.07	85	0.03	
[Pb]	206	He	3.184	3.43	15614	0.02	
[Pb]	207	He	2.779	3.43	12163	0.02	
Pb	208	He	2.996	2.97	60196	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	83897	1.41	78682	106.63	30	120	
In	115	He	725100	0.42	701170	103.41	30	120	
Lu	175	He	2105218	2.17	2054624	102.46	30	120	

Post Digestion Spike Sample (PDS) Report

Sample Table

Sample Name	K1700916-001A
Data File Name	023_PDS.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T09:20:11-08:00
Sample Type	PDS
Dilution	1
Comment	5
QC Ref File Name	021_ARF.d
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Spk Amt	%Rec	QC Flag
Cu	63	He	54.162	1.227	231381	1.29	50	91	
Cu	65	He	54.418	1.480	116306	0.91	50	92	
Sb	121	He	51.059	0.888	86465	0.54	50	102	
Sb	123	He	49.826	1.335	68990	0.25	50	99	
[Pb]	206	He	64.648	1.435	323904	0.70	50	98	
[Pb]	207	He	62.642	1.758	280371	1.03	50	98	
Pb	208	He	63.971	1.344	1313983	0.61	50	99	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	90200	1.18	78682	114.64	30	120	
In	115	He	749763	1.24	701170	106.93	30	120	
Lu	175	He	2155145	0.74	2054624	104.89	30	120	

Matrix Spike Sample (MS) Report

Sample Table

Sample Name	K1700916-001S
Data File Name	024_Spk.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T09:23:06-08:00
Sample Type	Spike
Dilution	1
Comment	5
QC Ref File Name	021_ARF.d
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

PDS is in control

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Spk Amt	%Rec	QC Flag
Cu	63	He	102.358	1.332	418139	0.64	100	94	
Cu	65	He	102.020	1.258	208524	0.54	100	93	
Sb	121	He	121.402	0.331	201223	0.56	200	61	Flag
Sb	123	He	118.687	0.671	160865	0.93	200	59	Flag
[Pb]	206	He	213.081	1.242	1047854	0.86	200	99	
[Pb]	207	He	218.138	1.086	958328	0.74	200	102	
Pb	208	He	221.455	1.640	4464506	0.89	200	103	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	86284	0.73	78682	109.66	30	120	
In	115	He	734154	0.30	701170	104.70	30	120	
Lu	175	He	2115434	0.93	2054624	102.96	30	120	

Matrix Spike Sample (MS) Report

Sample Table

Sample Name	K1700916-001SD
Data File Name	025_Spk.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T09:26:02-08:00
Sample Type	Spike
Dilution	1
Comment	5
QC Ref File Name	021_ARF.d
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

Apsis in control

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Spk Amt	%Rec	QC Flag
Cu	63	He	104.964	1.336	429384	0.59	100	96	
Cu	65	He	105.769	1.254	216491	0.78	100	97	
Sb	121	He	126.123	0.370	208835	0.55	200	63	Flag
Sb	123	He	123.382	0.810	167061	1.11	200	62	Flag
[Pb]	206	He	213.568	1.768	1063919	0.32	200	99	
[Pb]	207	He	217.834	1.370	969484	0.40	200	102	
Pb	208	He	222.146	1.555	4537048	0.68	200	104	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	86412	1.57	78682	109.82	30	120	
In	115	He	733428	0.69	701170	104.60	30	120	
Lu	175	He	2143219	1.49	2054624	104.31	30	120	

Sample Report

Sample Table

Sample Name	K1700916-002
Data File Name	026SMPL.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T09:28:59-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Cu	63	He	5.201	3.27	22046	0.02	
Cu	65	He	5.145	1.56	10904	0.05	
Sb	121	He	0.088	14.54	224	0.04	
Sb	123	He	0.081	25.13	166	0.05	
[Pb]	206	He	14.305	0.50	73936	0.02	
[Pb]	207	He	12.046	1.66	55603	0.02	
Pb	208	He	13.214	1.40	279921	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	88887	1.10	78682	112.97	30	120	
In	115	He	760308	2.13	701170	108.43	30	120	
Lu	175	He	2222320	2.82	2054624	108.16	30	120	

Sample Report

Sample Table

Sample Name	K1700916-004
Data File Name	027SMPL.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T09:31:54-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

no sample #4

wrong Auto sampler position 2/22/17

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Cu	63	He	1.193	173.76	934	0.13	
Cu	65	He	0.968	172.83	418	0.23	
Sb	121	He	1.587	168.54	660	0.24	
Sb	123	He	1.473	169.22	471	0.31	
[Pb]	206	He	2.512	170.76	1736	0.14	
[Pb]	207	He	2.407	170.33	1527	0.16	
Pb	208	He	2.505	170.60	7163	0.03	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	229759	83.51	78682	292.01	30	120	Flag
In	115	He	2114258	84.03	701170	301.53	30	120	Flag
Lu	175	He	5834153	83.82	2054624	283.95	30	120	Flag

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	028_CCV.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T09:35:38-08:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Cu	63	He	25.243	1.534	99333	1.04	25	101	
Cu	65	He	25.216	0.911	49644	1.33	25	101	
Sb	121	He	25.367	2.086	42381	1.62	25	101	
Sb	123	He	24.836	0.611	33929	0.39	25	99	
[Pb]	206	He	24.948	1.067	122722	0.79	25	100	
[Pb]	207	He	24.872	0.667	109296	0.99	25	99	
Pb	208	He	24.922	0.545	502590	0.68	25	100	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	83016	0.50	78682	105.51	30	120	
In	115	He	739098	0.50	701170	105.41	30	120	
Lu	175	He	2115599	1.22	2054624	102.97	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	029_CCB.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T09:38:33-08:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Cu	63	He	-0.002	-188.5	153	7.5	0.2	
Cu	65	He	0.015	106.2	99	32.0	0.2	
Sb	121	He	0.013	37.2	93	8.9	0.2	
Sb	123	He	0.015	83.0	72	24.5	0.05	
[Pb]	206	He	0.010	37.6	86	22.2	0.1	
[Pb]	207	He	0.011	68.9	69	48.5	0.1	
Pb	208	He	0.010	19.9	322	12.3	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	83315	0.80	78682	105.89	30	120	
In	115	He	746525	0.90	701170	106.47	30	120	
Lu	175	He	2125713	0.98	2054624	103.46	30	120	

Sample Report

Sample Table

Sample Name	K1700916-003
Data File Name	030SMPL.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T09:41:28-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Cu	63	He	10.737	1.34	45753	0.02	
Cu	65	He	10.558	0.64	22500	0.05	
Sb	121	He	0.161	8.47	348	0.05	
Sb	123	He	0.159	11.55	275	0.06	
[Pb]	206	He	49.415	0.97	247341	0.02	
[Pb]	207	He	41.343	1.19	184858	0.02	
Pb	208	He	45.627	1.28	936229	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	89694	1.33	78682	113.99	30	120	
In	115	He	757437	0.24	701170	108.02	30	120	
Lu	175	He	2153017	1.52	2054624	104.79	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	031_CCV.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T09:44:23-08:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Cu	63	He	24.914	0.678	99397	0.87	25	100	
Cu	65	He	24.928	0.695	49752	0.48	25	100	
Sb	121	He	25.360	0.573	42190	0.90	25	101	
Sb	123	He	25.008	0.472	34015	0.98	25	100	
[Pb]	206	He	24.748	1.043	123578	0.79	25	99	
[Pb]	207	He	24.759	1.737	110436	1.61	25	99	
Pb	208	He	24.540	0.830	502343	0.52	25	98	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	84161	1.17	78682	106.96	30	120	
In	115	He	735906	0.97	701170	104.95	30	120	
Lu	175	He	2147403	0.31	2054624	104.52	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	032_CCB.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T09:47:19-08:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Cu	63	He	-0.005	-71.5	139	11.3	0.2	
Cu	65	He	0.007	64.7	83	10.6	0.2	
Sb	121	He	0.005	50.5	80	5.5	0.2	
Sb	123	He	0.019	78.6	78	26.4	0.05	
[Pb]	206	He	0.007	88.8	68	43.0	0.1	
[Pb]	207	He	0.009	21.4	60	14.7	0.1	
Pb	208	He	0.007	31.0	263	16.6	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	83603	0.14	78682	106.25	30	120	
In	115	He	746254	1.02	701170	106.43	30	120	
Lu	175	He	2107087	0.46	2054624	102.55	30	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLCCVS
Data File Name	033LCCV.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T09:50:14-08:00
Sample Type	LLCCV
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Cu	63	He	0.190	3.406	892	3.74	0.2	95	
Cu	65	He	0.187	14.224	431	12.09	0.2	93	
Sb	121	He	0.119	4.873	268	4.05	0.1	119	
Sb	123	He	0.109	9.697	198	8.02	0.1	109	
[Pb]	206	He	0.101	7.839	524	6.43	0.1	101	
[Pb]	207	He	0.107	4.988	483	4.19	0.1	107	
Pb	208	He	0.106	2.351	2231	3.08	0.1	106	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	81924	1.69	78682	104.12	30	120	
In	115	He	732910	0.79	701170	104.53	30	120	
Lu	175	He	2091845	0.87	2054624	101.81	30	120	

Prep Blank (PB) Report

Sample Table

Sample Name	KQ1701570-01
Data File Name	034_PB.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T09:53:09-08:00
Sample Type	PB
Dilution	1
Comment	5
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Cu	63	He	-0.002	-547.5	157	26.6	0.2	
Cu	65	He	0.001	2115.8	72	34.6	0.2	
Sb	121	He	-0.001	-11.4	71	1.4	0.1	
Sb	123	He	0.009	116.4	66	23.1	0.05	
[Pb]	206	He	0.020	27.6	134	20.8	0.1	
[Pb]	207	He	0.028	10.1	144	9.6	0.1	
Pb	208	He	0.023	10.1	603	8.8	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	85223	1.12	78682	108.31	30	120	
In	115	He	762224	1.15	701170	108.71	30	120	
Lu	175	He	2161898	1.21	2054624	105.22	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	KQ1701570-05
Data File Name	035_LCS.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T09:56:04-08:00
Sample Type	LCS
Dilution	1
Comment	20
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Cu	63	He	25.312	1.403	99303	0.38	25	101.2	
Cu	65	He	25.317	2.139	49687	1.61	25	101.3	
Sb	121	He	49.249	1.175	80816	1.27	50	98.5	
Sb	123	He	48.594	0.773	65201	0.49	50	97.2	
[Pb]	206	He	50.994	1.652	246705	0.66	50	102.0	
[Pb]	207	He	53.069	1.061	229366	0.37	50	106.1	
Pb	208	He	51.858	1.476	1028543	0.48	50	103.7	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	82768	1.10	78682	105.19	30	120	
In	115	He	726462	0.28	701170	103.61	30	120	
Lu	175	He	2081035	0.99	2054624	101.29	30	120	

All Reference Sample Report

Sample Table

Sample Name	K1701359-001
Data File Name	036_ARF.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T09:59:01-08:00
Sample Type	AllRef
Dilution	1
Comment	5
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Cu	63	He	12.715	1.78	53043	0.02	
Cu	65	He	12.702	1.81	26498	0.05	
Sb	121	He	1.509	2.15	2643	0.06	
Sb	123	He	1.484	2.49	2119	0.07	
[Pb]	206	He	51.169	0.82	257776	0.02	
[Pb]	207	He	49.726	0.84	223783	0.02	
Pb	208	He	50.295	1.16	1038724	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	87858	1.03	78682	111.66	30	120	
In	115	He	754760	0.49	701170	107.64	30	120	
Lu	175	He	2166827	0.90	2054624	105.46	30	120	

Sample Report

Sample Table

Sample Name	K1701359-001L
Data File Name	037SMPL.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T10:01:56-08:00
Sample Type	Sample
Dilution	1
Comment	25
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Cu	63	He	2.612	0.34	10910	0.02	
Cu	65	He	2.603	1.20	5431	0.05	
Sb	121	He	0.316	3.21	603	0.05	
Sb	123	He	0.298	4.20	462	0.06	
[Pb]	206	He	10.536	1.37	52622	0.02	
[Pb]	207	He	10.223	1.72	45603	0.02	
Pb	208	He	10.353	1.45	211970	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	86916	0.11	78682	110.46	30	120	
In	115	He	745695	0.61	701170	106.35	30	120	
Lu	175	He	2147134	0.63	2054624	104.50	30	120	

Post Digestion Spike Sample (PDS) Report

Sample Table

Sample Name	K1701359-001A
Data File Name	038_PDS.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T10:04:51-08:00
Sample Type	PDS
Dilution	1
Comment	5
QC Ref File Name	036_ARF.d
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Spk Amt	%Rec	QC Flag
Cu	63	He	61.486	0.994	253585	0.81	50	98	
Cu	65	He	61.212	1.447	126316	1.73	50	97	
Sb	121	He	52.496	1.775	90530	0.25	50	102	
Sb	123	He	51.583	1.992	72736	0.50	50	100	
[Pb]	206	He	100.414	1.476	505256	0.55	50	98	
[Pb]	207	He	98.141	1.571	441143	0.23	50	97	
Pb	208	He	99.198	1.301	2046313	0.53	50	98	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	87088	1.06	78682	110.68	30	120	
In	115	He	763643	1.72	701170	108.91	30	120	
Lu	175	He	2164634	1.63	2054624	105.35	30	120	

Matrix Spike Sample (MS) Report

Sample Table

Sample Name	K1701359-001S
Data File Name	039_Spk.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T10:07:46-08:00
Sample Type	Spike
Dilution	1
Comment	5
QC Ref File Name	036_ARF.d
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

*LCS is in control

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Spk Amt	%Rec	QC Flag
Cu	63	He	113.141	1.295	462165	0.24	100	100	
Cu	65	He	113.131	2.431	231202	1.33	100	100	
Sb	121	He	66.661	1.013	111930	0.46	200	33	Flag
Sb	123	He	66.215	0.637	90914	0.72	200	32	Flag
[Pb]	206	He	288.309	0.830	1439122	1.50	200	119	
[Pb]	207	He	292.449	0.271	1304078	0.90	200	121	Flag
Pb	208	He	297.289	1.063	6083588	1.51	200	123	Flag

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	86286	1.16	78682	109.66	30	120	
In	115	He	743560	1.18	701170	106.05	30	120	
Lu	175	He	2147116	1.07	2054624	104.50	30	120	

Matrix Spike Sample (MS) Report

Sample Table

Sample Name	K1701359-001SD
Data File Name	040_Spk.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T10:10:41-08:00
Sample Type	Spike
Dilution	1
Comment	5
QC Ref File Name	036_ARF.d
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

* PDS is in control

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Spk Amt	%Rec	QC Flag
Cu	63	He	110.196	0.468	449035	0.38	100	97	
Cu	65	He	110.685	0.952	225667	0.66	100	98	
Sb	121	He	64.314	1.062	107556	0.86	200	31	Flag
Sb	123	He	63.372	0.792	86659	0.58	200	31	Flag *
[Pb]	206	He	295.159	3.322	1480479	3.33	200	122	Flag
[Pb]	207	He	293.921	0.465	1317060	0.62	200	122	Flag
Pb	208	He	301.044	0.162	6190483	0.22	200	125	Flag *

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	86066	0.30	78682	109.38	30	120	
In	115	He	740533	0.71	701170	105.61	30	120	
Lu	175	He	2157596	0.27	2054624	105.01	30	120	

Sample Report

Sample Table

Sample Name	K1701359-002
Data File Name	041SMPL.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T10:13:36-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Cu	63	He	13.662	1.34	56038	0.02	
Cu	65	He	13.481	1.90	27658	0.05	
Sb	121	He	1.172	6.31	2041	0.06	
Sb	123	He	1.199	5.94	1700	0.07	
[Pb]	206	He	66.303	0.88	333949	0.02	
[Pb]	207	He	63.636	1.26	286320	0.02	
Pb	208	He	64.600	1.20	1333876	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	86424	1.72	78682	109.84	30	120	
In	115	He	744632	0.20	701170	106.20	30	120	
Lu	175	He	2166531	1.23	2054624	105.45	30	120	

Sample Report

Sample Table

Sample Name	K1701359-003
Data File Name	042SMPL.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T10:16:32-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Cu	63	He	8.370	0.56	34876	0.02	
Cu	65	He	8.344	0.56	17387	0.05	
Sb	121	He	0.110	5.81	259	0.04	
Sb	123	He	0.099	13.43	191	0.05	
[Pb]	206	He	7.394	1.57	38116	0.02	
[Pb]	207	He	6.998	1.75	32217	0.02	
Pb	208	He	7.246	1.45	153112	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	87622	1.24	78682	111.36	30	120	
In	115	He	754907	0.44	701170	107.66	30	120	
Lu	175	He	2215381	0.27	2054624	107.82	30	120	

Sample Report

Sample Table

Sample Name	K1701359-004
Data File Name	043SMPL.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T10:19:27-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Cu	63	He	9.455	0.98	38712	0.02	
Cu	65	He	9.509	1.87	19470	0.05	
Sb	121	He	0.232	5.35	461	0.05	
Sb	123	He	0.235	5.72	374	0.06	
[Pb]	206	He	7.729	1.52	38890	0.02	
[Pb]	207	He	7.388	1.27	33201	0.02	
Pb	208	He	7.513	0.94	154972	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	86141	0.25	78682	109.48	30	120	
In	115	He	744696	0.41	701170	106.21	30	120	
Lu	175	He	2162633	0.42	2054624	105.26	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	044_CCV.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T10:22:22-08:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Cu	63	He	25.324	1.052	103100	0.74	25	101	
Cu	65	He	24.993	2.016	50905	2.10	25	100	
Sb	121	He	25.226	0.75B	43150	0.90	25	101	
Sb	123	He	24.778	0.703	34654	0.46	25	99	
[Pb]	206	He	24.626	0.371	124255	0.27	25	99	
[Pb]	207	He	24.700	0.587	111327	0.47	25	99	
Pb	208	He	24.712	0.663	511158	0.54	25	99	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	85887	0.63	78682	109.16	30	120	
In	115	He	756664	0.77	701170	107.91	30	120	
Lu	175	He	2169854	0.12	2054624	105.61	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	045_CCB.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T10:25:17-08:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Cu	63	He	0.006	126.2	192	17.4	0.2	
Cu	65	He	0.007	94.7	86	14.7	0.2	
Sb	121	He	-0.005	-94.4	65	13.6	0.2	
Sb	123	He	-0.004	-198.9	48	21.0	0.05	
[Pb]	206	He	0.023	16.9	153	13.2	0.1	
[Pb]	207	He	0.015	73.8	90	58.2	0.1	
Pb	208	He	0.020	9.6	530	8.2	0.1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	86504	0.45	78682	109.94	30	120	
In	115	He	770181	0.84	701170	109.84	30	120	
Lu	175	He	2185371	1.38	2054624	106.36	30	120	

Sample Report

Sample Table

Sample Name	K1701359-005
Data File Name	046SMPL.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T10:28:12-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Cu	63	He	4.304	1.24	18329	0.02	
Cu	65	He	4.332	2.51	9218	0.05	
Sb	121	He	0.073	9.19	202	0.04	
Sb	123	He	0.080	3.50	167	0.05	
[Pb]	206	He	8.580	1.98	43807	0.02	
[Pb]	207	He	8.153	1.49	37178	0.02	
Pb	208	He	8.312	1.82	173969	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	89142	1.25	78682	113.29	30	120	
In	115	He	771667	0.44	701170	110.05	30	120	
Lu	175	He	2194992	1.99	2054624	106.83	30	120	

Sample Report

Sample Table

Sample Name	K1701359-006
Data File Name	047SMPL.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T10:31:07-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Cu	63	He	5.539	1.37	23545	0.02	
Cu	65	He	5.544	1.06	11782	0.05	
Sb	121	He	0.083	4.90	218	0.04	
Sb	123	He	0.083	13.26	172	0.05	
[Pb]	206	He	9.552	1.37	48658	0.02	
[Pb]	207	He	8.984	0.77	40878	0.02	
Pb	208	He	9.320	0.67	194620	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	89162	1.03	78682	113.32	30	120	
In	115	He	770810	0.87	701170	109.93	30	120	
Lu	175	He	2189866	1.46	2054624	106.58	30	120	

Sample Report

Sample Table

Sample Name	K1701359-007
Data File Name	048SMPL.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T10:34:03-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Cu	63	He	18.223	1.53	77287	0.02	
Cu	65	He	18.374	1.44	38981	0.05	
Sb	121	He	1.474	2.53	2662	0.06	
Sb	123	He	1.499	0.96	2206	0.07	
[Pb]	206	He	181.775	1.18	934433	0.02	
[Pb]	207	He	174.763	1.52	802581	0.02	
Pb	208	He	182.278	1.95	3841064	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	89425	1.53	78682	113.65	30	120	
In	115	He	778026	0.72	701170	110.96	30	120	
Lu	175	He	2211565	2.13	2054624	107.64	30	120	

Sample Report

Sample Table

Sample Name	K1701359-008
Data File Name	049SMPL.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T10:36:57-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Cu	63	He	5.586	1.34	23715	0.02	
Cu	65	He	5.373	1.57	11407	0.05	
Sb	121	He	0.187	10.61	399	0.05	
Sb	123	He	0.168	12.61	292	0.06	
[Pb]	206	He	15.325	1.10	78549	0.02	
[Pb]	207	He	14.884	1.27	68142	0.02	
Pb	208	He	15.059	1.44	316407	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	89058	0.72	78682	113.19	30	120	
In	115	He	770017	0.46	701170	109.82	30	120	
Lu	175	He	2203794	0.37	2054624	107.26	30	120	

Sample Report

Sample Table

Sample Name	K1701359-009
Data File Name	050SMPL.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T10:39:52-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Cu	63	He	43.767	1.85	185025	0.02	
Cu	65	He	43.707	0.99	92445	0.05	
Sb	121	He	1.098	3.16	1946	0.06	
Sb	123	He	1.109	2.64	1601	0.07	
[Pb]	206	He	164.134	1.68	827071	0.02	
[Pb]	207	He	157.087	1.62	707146	0.02	
Pb	208	He	165.483	1.91	3418482	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	89247	0.86	78682	113.43	30	120	
In	115	He	756235	0.47	701170	107.85	30	120	
Lu	175	He	2167800	1.29	2054624	105.51	30	120	

Sample Report

Sample Table

Sample Name	K1701359-010
Data File Name	051SMPL.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T10:42:47-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Cu	63	He	110.996	0.82	464672	0.02	
Cu	65	He	110.699	1.04	231876	0.05	
Sb	121	He	19.047	1.06	32518	0.06	
Sb	123	He	18.870	1.54	26336	0.07	
[Pb]	206	He	3216.915	1.99	16163492	0.02	>LDR
[Pb]	207	He	3069.005	1.92	13778735	0.02	>LDR
Pb	208	He	3110.174	2.28	64063324	0.00	>LDR

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QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	88422	1.34	78682	112.38	30	120	
In	115	He	754784	0.75	701170	107.65	30	120	
Lu	175	He	2162087	2.53	2054624	105.23	30	120	

Sample Report

Sample Table

Sample Name	K1701359-011
Data File Name	052SMPL.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T10:45:42-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Cu	63	He	106.961	1.60	447876	0.02	
Cu	65	He	106.793	0.69	223760	0.05	
Sb	121	He	25.476	1.21	44162	0.06	
Sb	123	He	24.937	0.86	35343	0.07	
[Pb]	206	He	5191.549	1.00	26519396	0.02	>LDR
[Pb]	207	He	4895.134	1.41	22339111	0.02	>LDR
Pb	208	He	4949.427	1.22	103649379	0.00	>LDR

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QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	88452	1.39	78682	112.42	30	120	
In	115	He	766790	0.05	701170	109.36	30	120	
Lu	175	He	2197530	1.22	2054624	106.96	30	120	

Sample Report

Sample Table

Sample Name	K1701359-012
Data File Name	053SMPL.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T10:48:37-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Cu	63	He	32.960	2.26	138887	0.02	
Cu	65	He	33.219	1.49	70042	0.05	
Sb	121	He	1.589	3.71	2809	0.06	
Sb	123	He	1.586	3.54	2285	0.07	
[Pb]	206	He	284.108	1.33	1442006	0.02	
[Pb]	207	He	275.241	1.04	1248066	0.02	
Pb	208	He	285.393	0.84	5938968	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	88950	1.96	78682	113.05	30	120	
In	115	He	762652	1.06	701170	108.77	30	120	
Lu	175	He	2183553	1.58	2054624	106.28	30	120	

Sample Report

Sample Table

Sample Name	K1701359-013
Data File Name	054SMPL.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T10:51:32-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Cu	63	He	184.196	1.01	769725	0.02	
Cu	65	He	183.849	0.14	384418	0.05	
Sb	121	He	2.655	2.61	4633	0.06	
Sb	123	He	2.579	1.93	3675	0.07	
[Pb]	206	He	560.489	2.72	2833057	0.02	>LDR
[Pb]	207	He	537.827	2.58	2428931	0.02	>LDR
~~Pb~~	~~208~~	~~He~~	~~536.689~~	~~1.79~~	~~11122405~~	~~0.00~~	~~>LDR~~

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QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	88277	0.28	78682	112.19	30	120	
In	115	He	761008	1.12	701170	108.53	30	120	
Lu	175	He	2174874	1.55	2054624	105.85	30	120	

Sample Report

Sample Table

Sample Name	K1701359-014
Data File Name	055SMPL.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T10:54:28-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Cu	63	He	48.413	0.93	201445	0.02	
Cu	65	He	48.497	1.41	100955	0.05	
Sb	121	He	2.947	1.11	5166	0.06	
Sb	123	He	2.877	1.90	4119	0.07	
[Pb]	206	He	541.765	1.41	2786054	0.02	>LDR
[Pb]	207	He	511.018	1.45	2347436	0.02	>LDR
~~Pb~~	~~208~~	~~He~~	~~510.603~~	~~0.35~~	~~10764647~~	~~0.00~~	~~>LDR~~

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QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	87850	1.50	78682	111.65	30	120	
In	115	He	765735	0.26	701170	109.21	30	120	
Lu	175	He	2212009	0.82	2054624	107.66	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	056_CCV.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T10:57:56-08:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Cu	63	He	25.238	0.266	104647	0.47	25	101	
Cu	65	He	24.702	0.466	51241	0.40	25	99	
Sb	121	He	25.352	0.839	43786	0.73	25	101	
Sb	123	He	24.766	0.125	34973	0.32	25	99	
[Pb]	206	He	25.087	1.511	127712	1.45	25	100	
[Pb]	207	He	25.023	2.504	113768	0.65	25	100	
Pb	208	He	25.037	2.110	522429	0.84	25	100	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	87470	0.70	78682	111.17	30	120	
In	115	He	763987	0.20	701170	108.96	30	120	
Lu	175	He	2189586	2.26	2054624	106.57	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	057_CCB.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T11:02:04-08:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Cu	63	He	0.008	49.8	207	9.0	0.2	
Cu	65	He	0.009	49.4	93	10.7	0.2	
Sb	121	He	-0.016	-40.8	46	24.6	0.2	
Sb	123	He	-0.014	-27.8	34	17.3	0.05	
[Pb]	206	He	0.148	7.8	798	8.6	0.1	CCB Failed
[Pb]	207	He	0.160	0.7	756	2.4	0.1	CCB Failed
Pb	208	He	0.152	2.9	3325	3.7	0.1	CCB Failed

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QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	89048	0.67	78682	113.17	30	120	
In	115	He	782657	1.05	701170	111.62	30	120	
Lu	175	He	2211191	2.02	2054624	107.62	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	058_CCB.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T11:04:59-08:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

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QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Cu	63	He	-0.003	-101.1	156	9.7	0.2	
Cu	65	He	0.006	132.5	86	18.4	0.2	
Sb	121	He	-0.016	-26.7	46	17.1	0.2	
Sb	123	He	-0.018	-11.6	28	10.2	0.05	
[Pb]	206	He	0.116	5.1	631	4.7	0.1	CCB Failed
[Pb]	207	He	0.120	1.7	567	1.8	0.1	CCB Failed
Pb	208	He	0.115	2.3	2539	2.6	0.1	CCB Failed

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	87645	1.71	78682	111.39	30	120	
In	115	He	785286	0.32	701170	112.00	30	120	
Lu	175	He	2197320	0.43	2054624	106.95	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	059_CCB.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T11:08:15-08:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

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QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Cu	63	He	-0.006	-122.8	141	21.8	0.2	
Cu	65	He	0.016	60.3	104	18.1	0.2	
Sb	121	He	-0.025	-23.5	31	32.7	0.2	
Sb	123	He	-0.008	-55.3	43	14.8	0.05	
[Pb]	206	He	0.102	17.7	557	15.1	0.1	CCB Failed
[Pb]	207	He	0.100	2.8	478	2.1	0.1	
Pb	208	He	0.100	8.1	2231	6.2	0.1	CCB Failed

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	86663	0.55	78682	110.14	30	120	
In	115	He	778904	0.65	701170	111.09	30	120	
Lu	175	He	2203824	1.39	2054624	107.26	30	120	

Sample Report

Sample Table

Sample Name	K1701359-015
Data File Name	060SMPL.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T11:11:10-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Cu	63	He	354.630	0.97	1508793	0.02	
Cu	65	He	340.213	0.29	724260	0.05	
Sb	121	He	16.246	0.60	28330	0.06	
Sb	123	He	15.941	1.37	22725	0.07	
[Pb]	206	He	2623.359	1.62	13414563	0.02	>LDR
[Pb]	207	He	2471.536	2.05	11290343	0.02	>LDR
~~Pb~~	~~208~~	~~He~~	~~2518.242~~	~~1.86~~	~~52791338~~	~~0.00~~	~~>LDR~~

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QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	89884	0.42	78682	114.24	30	120	
In	115	He	770643	0.59	701170	109.91	30	120	
Lu	175	He	2199783	0.63	2054624	107.06	30	120	

Sample Report

Sample Table

Sample Name	K1701359-016
Data File Name	061SMPL.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T11:14:05-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Cu	63	He	16679.194	1.81	71620648	0.02	>LDR
~~Cu~~	~~65~~	~~He~~	~~16645.765~~	~~0.73~~	~~35764883~~	~~0.05~~	~~>LDR~~
Sb	121	He	457.892	0.81	802820	0.06	
Sb	123	He	449.899	0.66	645042	0.07	
[Pb]	206	He	82349.868	1.13	426549041	0.02	>LDR
[Pb]	207	He	77652.639	1.65	359328635	0.02	>LDR
~~Pb~~	~~208~~	~~He~~	~~79414.805~~	~~1.06~~	~~1686389497~~	~~0.00~~	~~>LDR~~

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QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	90729	0.53	78682	115.31	30	120	
In	115	He	776801	0.28	701170	110.79	30	120	
Lu	175	He	2228287	1.03	2054624	108.45	30	120	

Sample Report

Sample Table

Sample Name	K1701359-017
Data File Name	062SMPL.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T11:24:19-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Cu	63	He	204.716	0.37	872862	0.02	
Cu	65	He	204.900	0.52	437127	0.05	
Sb	121	He	8.647	2.19	15242	0.06	
Sb	123	He	8.546	2.22	12309	0.07	
[Pb]	206	He	1707.181	1.59	8888070	0.02	>LDR
[Pb]	207	He	1629.135	1.43	7577391	0.02	>LDR
Pb	208	He	1638.358	1.08	34972062	0.00	>LDR

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QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	90071	0.78	78682	114.47	30	120	
In	115	He	777227	1.58	701170	110.85	30	120	
Lu	175	He	2239888	1.58	2054624	109.02	30	120	

Sample Report

Sample Table

Sample Name	K1701359-018
Data File Name	063SMPL.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T11:27:15-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Cu	63	He	1157.746	1.49	4905064	0.02	>LDR
~~Cu~~	~~65~~	~~He~~	~~1183.719~~	~~3.51~~	~~2508580~~	~~0.05~~	>LDR
Sb	121	He	84.225	0.23	147603	0.06	
Sb	123	He	82.599	1.78	118349	0.07	
[Pb]	206	He	22143.533	2.69	113562604	0.02	>LDR
[Pb]	207	He	20609.119	2.48	94427110	0.02	>LDR
Pb	208	He	21032.505	2.75	442211358	0.00	>LDR

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QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	89525	1.92	78682	113.78	30	120	
In	115	He	776127	1.39	701170	110.69	30	120	
Lu	175	He	2207201	2.84	2054624	107.43	30	120	

Sample Report

Sample Table

Sample Name	K1701359-019
Data File Name	064SMPL.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T11:31:10-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Cu	63	He	51.024	2.29	222124	0.02	
Cu	65	He	51.188	2.00	111492	0.05	
Sb	121	He	0.944	3.80	1755	0.05	
Sb	123	He	0.962	4.70	1453	0.07	
[Pb]	206	He	159.955	1.30	831052	0.02	
[Pb]	207	He	154.742	1.70	718204	0.02	
Pb	208	He	162.076	1.70	3452091	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	91927	1.42	78682	116.83	30	120	
In	115	He	788428	1.42	701170	112.44	30	120	
Lu	175	He	2235044	1.14	2054624	108.78	30	120	

Sample Report

Sample Table

Sample Name	K1701359-020
Data File Name	065SMPL.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T11:36:S1-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Cu	63	He	507.754	2.42	2144282	0.02	>LDR
Cu	65	He	488.373	0.53	1032139	0.05	
Sb	121	He	5.404	2.72	9430	0.06	
Sb	123	He	5.299	2.27	7S56	0.07	
[Pb]	206	He	401.914	1.64	2042691	0.02	
[Pb]	207	He	387.571	1.03	1759683	0.02	
Pb	208	He	384.397	1.63	8009306	0.00	

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QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	89241	1.69	78682	113.42	30	120	
In	115	He	767265	1.28	701170	109.43	30	120	
Lu	175	He	2186336	1.21	2054624	106.41	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	066_CCV.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T11:40:47-08:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Cu	63	He	24.939	1.319	104510	0.98	25	100	
Cu	65	He	25.021	1.110	52458	1.69	25	100	
Sb	121	He	25.283	0.783	43734	0.57	25	101	
Sb	123	He	24.930	1.461	35256	0.87	25	100	
[Pb]	206	He	26.344	0.914	134853	0.58	25	105	
[Pb]	207	He	26.203	2.314	119812	1.99	25	105	
Pb	208	He	26.316	1.258	552226	1.00	25	105	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	88404	0.99	78682	112.36	30	120	
In	115	He	765192	1.29	701170	109.13	30	120	
Lu	175	He	2201410	0.39	2054624	107.14	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	067_CCB.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T11:44:41-08:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

See previous 2/22/17

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Cu	63	He	0.101	11.8	579	7.8	0.2	
Cu	65	He	0.083	9.2	243	5.5	0.2	
Sb	121	He	-0.021	-10.0	37	11.3	0.2	
Sb	123	He	-0.011	-39.6	38	15.5	0.05	
[Pb]	206	He	1.094	3.4	5520	1.8	1	CCB Failed
[Pb]	207	He	1.050	2.2	4720	0.6	1	CCB Failed
Pb	208	He	1.061	3.5	21911	1.8	1	CCB Failed

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	86623	1.10	78682	110.09	30	120	
In	115	He	773596	1.35	701170	110.33	30	120	
Lu	175	He	21S6403	1.66	2054624	104.95	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	070_CCB.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T11:59:18-08:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Cu	63	He	0.031	7.6	297	3.0	0.2	
Cu	65	He	0.058	13.9	192	8.9	0.2	
Sb	121	He	-0.023	-27.9	33	35.0	0.2	
Sb	123	He	-0.020	-27.9	24	32.2	0.05	
[Pb]	206	He	0.506	2.6	2655	3.0	1	
[Pb]	207	He	0.514	3.0	2398	2.3	1	
Pb	208	He	0.510	1.6	10947	0.9	1	

use Pb mpl 1-ppm

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	87454	0.67	78682	111.15	30	120	
In	115	He	776275	0.77	701170	110.71	30	120	
Lu	175	He	2226199	0.72	2054624	108.35	30	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLCCVS
Data File Name	071LCCV.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T12:03:40-08:00
Sample Type	LLCCV
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Cu	63	He	0.265	1.152	1233	2.58	0.2	133	
~~Cu~~	~~65~~	~~He~~	~~0.271~~	~~11.925~~	~~617~~	~~9.61~~	~~0.2~~	~~135~~	~~LLCCV Failed~~
Sb	121	He	0.097	9.866	241	6.42	0.1	97	
Sb	123	He	0.090	8.964	180	6.68	0.1	90	
[Pb]	206	He	1.048	2.773	5369	3.86	0.1	1048	LLCCV Failed
[Pb]	207	He	1.009	5.375	4601	3.48	0.1	1009	LLCCV Failed
~~Pb~~	~~208~~	~~He~~	~~1.034~~	~~2.802~~	~~21680~~	~~1.75~~	~~0.1~~	~~1034~~	~~LLCCV Failed~~

use 2x

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QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	85203	1.77	78682	108.29	30	120	
In	115	He	767498	0.89	701170	109.46	30	120	
Lu	175	He	2188431	2.52	2054624	106.51	30	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLCCVS
Data File Name	072LCCV.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T12:09:04-08:00
Sample Type	LLCCV
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

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QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Cu	63	He	0.240	14.688	1139	13.30	0.2	120	
Cu	65	He	0.266	14.378	611	13.61	0.2	133	LLCCV Failed
Sb	121	He	0.089	17.896	228	11.44	0.1	89	
Sb	123	He	0.100	18.220	194	13.89	0.1	100	
[Pb]	206	He	1.034	0.069	5278	1.58	0.1	1034	LLCCV Failed
[Pb]	207	He	1.012	1.915	4604	1.38	0.1	1012	LLCCV Failed
Pb	208	He	1.002	1.344	20941	0.34	0.1	1002	LLCCV Failed

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	85678	0.98	78682	108.89	30	120	
In	115	He	765615	0.72	701170	109.19	30	120	
Lu	175	He	2181255	1.62	2054624	106.16	30	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLCCVS
Data File Name	073LCCV.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T12:12:58-08:00
Sample Type	LLCCV
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

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QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Cu	63	He	0.262	6.135	1234	6.16	0.2	131	
Cu	65	He	0.244	8.447	570	8.12	0.2	122	
Sb	121	He	0.084	24.066	218	16.17	0.1	84	
Sb	123	He	0.070	2.419	152	1.10	0.1	70	
[Pb]	206	He	0.983	2.055	5031	0.87	0.1	983	
[Pb]	207	He	0.968	7.091	4414	6.15	0.1	968	
Pb	208	He	0.965	3.168	20240	2.42	0.1	965	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	86148	1.16	78682	109.49	30	120	
In	115	He	763311	1.13	701170	108.86	30	120	
Lu	175	He	2187092	1.22	2054624	106.45	30	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLCCVS 2X
Data File Name	074_QC1.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T12:16:53-08:00
Sample Type	QC1
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

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QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Cu	63	He	-0.020	-13.328	221	19.38	0.4	-5	QC1 Main CR1 Failed
Cu	65	He	-0.012	-46.772	136	40.06	0.4	-3	QC1 Main CR1 Failed
Sb	121	He	-0.025	-5.222	87	15.33	0.2	-13	QC1 Main CR1 Failed
Sb	123	He	-0.012	-43.164	104	3.69	0.2	-6	QC1 Main CR1 Failed
[Pb]	206	He	0.052	24.784	802	4.40	0.2	26	QC1 Main CR1 Failed
[Pb]	207	He	0.051	9.440	686	12.78	0.2	25	QC1 Main CR1 Failed
Pb	208	He	0.053	20.271	3320	5.20	0.2	26	QC1 Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	234661	21.66	78682	298.24	30	120	Flag
In	115	He	2259620	21.28	701170	322.26	30	120	Flag
Lu	175	He	6064000	20.54	2054624	295.14	30	120	Flag

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLCCVS 2X
Data File Name	075_QC1.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T12:20:48-08:00
Sample Type	QC1
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Cu	63	He	0.439	4.406	1933	3.85	0.4	110	
Cu	65	He	0.416	8.701	911	8.10	0.4	104	
Sb	121	He	0.176	20.523	379	17.06	0.2	88	
Sb	123	He	0.181	10.038	309	7.75	0.2	90	
[Pb]	206	He	0.489	6.527	2506	5.83	0.2	244	QC1 Main CR1 Failed
[Pb]	207	He	0.499	4.743	2271	4.12	0.2	249	QC1 Main CR1 Failed
~~Pb~~	~~208~~	~~He~~	~~0.484~~	~~2.411~~	~~10155~~	~~1.33~~	~~0.2~~	~~242~~	QC1 Main CR1 Failed

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QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	85247	0.26	78682	108.34	30	120	
In	115	He	767556	0.64	701170	109.47	30	120	
Lu	175	He	2174329	1.16	2054624	105.83	30	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLCCVS 2X
Data File Name	076_QC1.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T12:25:40-08:00
Sample Type	QC1
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

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QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Cu	63	He	0.410	2.973	1860	2.96	0.4	103	
Cu	65	He	0.388	2.689	873	1.98	0.4	97	
Sb	121	He	0.167	13.543	366	11.73	0.2	84	
Sb	123	He	0.182	5.161	312	2.16	0.2	91	
[Pb]	206	He	0.432	4.853	2275	7.41	0.2	216	
[Pb]	207	He	0.458	6.768	2136	3.89	0.2	229	
Pb	208	He	0.444	3.280	9536	1.13	0.2	222	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	87168	0.56	78682	110.78	30	120	
In	115	He	771725	2.08	701170	110.06	30	120	
Lu	175	He	2225492	2.73	2054624	108.32	30	120	

Sample Report

Sample Table

Sample Name	LLCCVS 1.0 ppb
Data File Name	077SMPL.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T12:29:36-08:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

See Report 2/22/17

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Cu	63	He	1.078	1.90	4545	0.02	
Cu	65	He	1.081	1.02	2269	0.05	
Sb	121	He	1.004	1.94	1793	0.06	
Sb	123	He	1.034	3.92	1501	0.07	
[Pb]	206	He	1.302	4.65	6565	0.02	
[Pb]	207	He	1.292	3.57	5807	0.02	
Pb	208	He	1.304	2.94	26925	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	85832	0.31	78682	109.09	30	120	
In	115	He	759371	0.48	701170	108.30	30	120	
Lu	175	He	2157570	1.80	2054624	105.01	30	120	

Sample Report

Sample Table

Sample Name	LLCCVS 1.0 ppb
Data File Name	078SMPL.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T12:33:30-08:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Cu	63	He	1.084	2.51	4548	0.02	
Cu	65	He	1.101	2.35	2300	0.05	
Sb	121	He	1.019	2.53	1826	0.06	
Sb	123	He	0.970	5.70	1417	0.07	
[Pb]	206	He	1.262	3.52	6389	0.02	
[Pb]	207	He	1.241	5.22	5602	0.02	
Pb	208	He	1.267	3.01	26277	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	85461	0.96	78682	108.62	30	120	
In	115	He	762358	0.83	701170	108.73	30	120	
Lu	175	He	2167580	2.71	2054624	105.50	30	120	

Prep Blank (PB) Report

Sample Table

Sample Name	KQ1701586-01
Data File Name	079_PB.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T12:37:26-08:00
Sample Type	PB
Dilution	1
Comment	5
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Cu	63	He	0.011	34.8	218	7.9	0.2	
Cu	65	He	0.015	160.8	107	48.1	0.2	
Sb	121	He	-0.029	-14.9	24	30.7	0.1	
Sb	123	He	-0.020	-5.8	25	6.7	0.05	
[Pb]	206	He	0.200	2.9	1079	4.0	1	
[Pb]	207	He	0.190	6.5	908	5.3	1	
Pb	208	He	0.192	2.2	4222	0.8	1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	89437	0.57	78682	113.67	30	120	
In	115	He	780017	0.16	701170	111.25	30	120	
Lu	175	He	2244253	1.27	2054624	109.23	30	120	

Laboratory Control Sample (LCS) Report

Sample Table

Sample Name	KQ1701586-02
Data File Name	080_LCS.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T12:42:04-08:00
Sample Type	LCS
Dilution	1
Comment	20
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Cu	63	He	25.581	1.030	104016	0.63	25	102.3	
Cu	65	He	25.120	2.653	51097	2.23	25	100.5	
Sb	121	He	48.689	1.159	83258	0.42	50	97.4	
Sb	123	He	47.663	0.168	66646	0.70	50	95.3	
[Pb]	206	He	51.600	1.241	253590	0.54	50	103.2	
[Pb]	207	He	S3.303	1.866	233999	0.53	50	106.6	
Pb	208	He	52.480	1.799	1057288	0.50	50	105.0	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	85778	0.46	78682	109.02	30	120	
In	115	He	757057	0.75	701170	107.97	30	120	
Lu	175	He	2114036	1.63	2054624	102.89	30	120	

All Reference Sample Report

Sample Table

Sample Name	K1701359-021
Data File Name	081_ARF.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T12:45:59-08:00
Sample Type	AllRef
Dilution	1
Comment	5
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Cu	63	He	252.961	0.58	1076789	0.02	
Cu	65	He	252.419	0.71	537638	0.05	
Sb	121	He	4.722	0.83	8299	0.06	
Sb	123	He	4.687	2.60	6729	0.07	
[Pb]	206	He	826.880	0.67	4241415	0.02	AllRef Main CR1 Failed
[Pb]	207	He	787.703	1.47	3609631	0.02	AllRef Main CR1 Failed
Pb	208	He	788.004	1.29	16571149	0.00	AllRef Main CR1 Failed

Pb 208 2/22/17

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	89926	0.30	78682	114.29	30	120	
In	115	He	771851	0.34	701170	110.08	30	120	
Lu	175	He	2206546	0.86	2054624	107.39	30	120	

Sample Report

Sample Table

Sample Name	K1701359-021L
Data File Name	082SMPL.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T12:53:30-08:00
Sample Type	Sample
Dilution	1
Comment	25
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Cu	63	He	51.128	0.51	219764	0.02	
Cu	65	He	51.079	0.35	109849	0.05	
Sb	121	He	0.902	4.06	1641	0.05	
Sb	123	He	0.875	2.08	1296	0.07	
[Pb]	206	He	155.416	0.92	798747	0.02	
[Pb]	207	He	150.428	0.56	690659	0.02	
~~Pb~~	~~208~~	~~He~~	~~158.445~~	~~0.73~~	~~3338423~~	~~0.00~~	

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QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	90750	1.06	78682	115.34	30	120	
In	115	He	769561	1.10	701170	109.75	30	120	
Lu	175	He	2210696	0.29	2054624	107.60	30	120	

Post Digestion Spike Sample (PDS) Report

Sample Table

Sample Name	K1701359-021A
Data File Name	083_PDS.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T12:57:24-08:00
Sample Type	PDS
Dilution	1
Comment	5
QC Ref File Name	081_ARF.d
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Spk Amt	%Rec	QC Flag
Cu	63	He	296.510	0.584	1254185	1.09	50	87	
Cu	65	He	297.290	0.814	629196	1.15	50	90	
Sb	121	He	55.753	1.305	96750	0.26	50	102	
Sb	123	He	55.091	0.613	78176	0.80	50	101	
[Pb]	206	He	846.826	1.475	4362865	1.44	50	40	Flag
[Pb]	207	He	808.707	1.405	3722247	1.55	50	42	Flag
Pb	208	He	817.364	0.690	17264261	0.88	50	59	Flag

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QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	89358	0.52	78682	113.57	30	120	
In	115	He	768399	1.30	701170	109.59	30	120	
Lu	175	He	2216202	0.20	2054624	107.86	30	120	

Sample Report

Sample Table

Sample Name	K1701359-021S
Data File Name	084SMPL.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T13:01:20-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

* PDS is in control

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Cu	63	He	321.769	1.85	1345732	0.02	
Cu	65	He	322.108	1.26	674118	0.05	
Sb	121	He	67.512	0.21	113270	0.06	
Sb	123	He	66.129	0.99	90721	0.07	
[Pb]	206	He	1092.119	0.78	5551458	0.02	>LDR
[Pb]	207	He	1067.850	2.14	4848350	0.02	>LDR
~~Pb~~	~~208~~	~~He~~	~~1059.108~~	~~1.45~~	~~22069177~~	~~0.00~~	~~>LDR~~

70% *
31%

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QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	88378	2.00	78682	112.32	30	120	
In	115	He	742931	0.42	701170	105.96	30	120	
Lu	175	He	2186829	2.11	2054624	106.43	30	120	

Sample Report

Sample Table

Sample Name	K1701359-021SD
Data File Name	085SMPL.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T13:05:14-08:00
Sample Type	Sample
Dilution	1
Comment	5
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

* PDS IS IN CONTROL

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Cu	63	He	446.779	2.97	1851787	0.02	
Cu	65	He	430.468	1.41	892849	0.05	
Sb	121	He	66.833	0.25	113063	0.06	
Sb	123	He	65.944	0.82	91219	0.07	
[Pb]	206	He	1088.029	1.86	5460226	0.02	>LDR
[Pb]	207	He	1062.079	0.82	4762072	0.02	>LDR
Pb	208	He	1060.829	1.68	21825574	0.00	>LDR

178% *

319% *

2/22/17

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	87590	1.66	78682	111.32	30	120	
In	115	He	749105	0.66	701170	106.84	30	120	
Lu	175	He	2159121	1.60	2054624	105.09	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	086_CCV.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T13:09:10-08:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Cu	63	He	25.298	0.687	104108	1.14	25	101	
Cu	65	He	25.064	0.776	51599	1.16	25	100	
Sb	121	He	25.428	0.675	43501	0.95	25	102	
Sb	123	He	24.732	1.468	34593	1.30	25	99	
[Pb]	206	He	25.918	0.847	128525	1.20	25	104	
[Pb]	207	He	25.981	0.576	115095	1.60	25	104	
Pb	208	He	25.903	1.384	526558	1.01	25	104	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	86810	0.53	78682	110.33	30	120	
In	115	He	756738	0.28	701170	107.93	30	120	
Lu	175	He	2132797	2.04	2054624	103.80	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	087_CCB.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T13:13:04-08:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Cu	63	He	0.042	44.6	333	23.0	0.2	
Cu	65	He	0.031	38.5	134	17.9	0.2	
Sb	121	He	-0.017	-24.1	45	16.1	0.2	
Sb	123	He	-0.009	-114.6	41	36.8	0.05	
[Pb]	206	He	0.264	7.0	1388	7.0	1	
[Pb]	207	He	0.287	2.7	1337	2.9	1	
Pb	208	He	0.268	4.7	5765	3.1	1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	85651	0.73	78682	108.86	30	120	
In	115	He	775046	0.48	701170	110.54	30	120	
Lu	175	He	2206161	1.70	2054624	107.38	30	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLCCVS
Data File Name	088LCCV.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T13:17:07-08:00
Sample Type	LLCCV
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Cu	63	He	0.257	2.825	1213	3.10	0.2	128	
~~Cu~~	~~65~~	~~He~~	~~0.254~~	~~10.313~~	~~590~~	~~7.85~~	~~0.2~~	~~127~~	
Sb	121	He	0.098	18.866	244	12.99	0.1	98	
Sb	123	He	0.101	22.315	196	15.84	0.1	101	
[Pb]	206	He	0.845	0.977	4355	1.24	0.1	845	
[Pb]	207	He	0.852	0.851	3912	1.65	0.1	852	
~~Pb~~	~~208~~	~~He~~	~~0.843~~	~~2.302~~	~~17797~~	~~3.14~~	~~0.1~~	~~843~~	

see 2x 2/22/17

see 1.0 ppb

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	86188	1.18	78682	109.54	30	120	
In	115	He	768924	0.56	701170	109.66	30	120	
Lu	175	He	2198554	0.87	2054624	107.01	30	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLCCVS 2X
Data File Name	089_QC1.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T13:22:30-08:00
Sample Type	QC1
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Cu	63	He	0.409	13.964	1845	11.07	0.4	102	
Cu	65	He	0.408	6.381	911	7.03	0.4	102	
Sb	121	He	0.185	5.579	396	4.43	0.2	92	
Sb	123	He	0.176	8.172	304	6.76	0.2	88	
[Pb]	206	He	0.384	5.308	1961	4.08	0.2	192	
[Pb]	207	He	0.354	3.086	1605	4.16	0.2	177	
~~Pb~~	~~208~~	~~He~~	~~0.362~~	~~1.431~~	~~7554~~	~~1.88~~	~~0.2~~	~~181~~	

see 1.0 ppb 2/22/17

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	86715	1.53	78682	110.21	30	120	
In	115	He	772085	0.46	701170	110.11	30	120	
Lu	175	He	2155731	1.17	2054624	104.92	30	120	

Sample Report

Sample Table

Sample Name	LLCCVS 1.0 ppb
Data File Name	090SMPL.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T13:25:40-08:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Cu	63	He	1.085	6.35	4530	0.02	
Cu	65	He	1.116	5.35	2317	0.05	
Sb	121	He	1.050	1.77	1866	0.06	
Sb	123	He	0.994	1.00	1441	0.07	
[Pb]	206	He	1.209	3.17	6147	0.02	
[Pb]	207	He	1.234	2.70	5597	0.02	
Pb	208	He	1.205	1.72	25090	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	85044	1.47	78682	108.08	30	120	
In	115	He	756617	0.51	701170	107.91	30	120	
Lu	175	He	2174849	1.88	2054624	105.85	30	120	

Sample Report

Sample Table

Sample Name	K1701359-010
Data File Name	091SMPL.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T13:28:51-08:00
Sample Type	Sample
Dilution	1
Comment	500
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Cu	63	He	1.042	3.52	4397	0.02	
Cu	65	He	1.030	1.78	2166	0.05	
Sb	121	He	0.159	17.58	341	0.05	
Sb	123	He	0.144	7.99	252	0.06	
[Pb]	206	He	28.059	0.93	139061	0.02	
[Pb]	207	He	27.648	1.18	122399	0.02	
Pb	208	He	27.869	0.85	566237	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	85833	0.84	78682	109.09	30	120	
In	115	He	750319	0.03	701170	107.01	30	120	
Lu	175	He	2131527	1.40	2054624	103.74	30	120	

Sample Report

Sample Table

Sample Name	K1701359-011
Data File Name	092SMPL.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T13:32:02-08:00
Sample Type	Sample
Dilution	1
Comment	500
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Cu	63	He	1.146	2.66	4924	0.02	
Cu	65	He	1.159	3.97	2480	0.05	
Sb	121	He	0.253	6.80	504	0.05	
Sb	123	He	0.248	2.37	399	0.06	
[Pb]	206	He	52.767	1.41	265260	0.02	
[Pb]	207	He	50.403	1.25	226351	0.02	
Pb	208	He	51.302	0.56	1057310	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	87688	1.47	78682	111.45	30	120	
In	115	He	756617	0.25	701170	107.91	30	120	
Lu	175	He	2162273	0.81	2054624	105.24	30	120	

Sample Report

Sample Table

Sample Name	K1701359-013
Data File Name	093SMPL.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T13:35:13-08:00
Sample Type	Sample
Dilution	1
Comment	500
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Cu	63	He	14.935	1.36	62681	0.02	
Cu	65	He	15.278	2.22	32068	0.05	
Sb	121	He	0.167	5.32	358	0.05	
Sb	123	He	0.217	8.46	355	0.06	
[Pb]	206	He	43.131	1.02	218418	0.02	
[Pb]	207	He	41.487	0.94	187682	0.02	
Pb	208	He	41.995	0.91	871843	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	88442	1.05	78682	112.40	30	120	
In	115	He	756024	0.83	701170	107.82	30	120	
Lu	175	He	2178152	0.78	2054624	106.01	30	120	

Sample Report

Sample Table

Sample Name	K1701359-014
Data File Name	094SMPL.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T13:38:24-08:00
Sample Type	Sample
Dilution	1
Comment	500
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Cu	63	He	4.791	1.28	20232	0.02	
Cu	65	He	4.760	1.88	10045	0.05	
Sb	121	He	0.254	12.08	511	0.05	
Sb	123	He	0.253	3.69	409	0.06	
[Pb]	206	He	50.791	0.59	252205	0.02	
[Pb]	207	He	48.993	0.66	217323	0.02	
Pb	208	He	49.581	0.82	1009263	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	88472	1.21	78682	112.44	30	120	
In	115	He	763220	0.48	701170	108.85	30	120	
Lu	175	He	2135836	1.84	2054624	103.95	30	120	

Sample Report

Sample Table

Sample Name	K1701359-015
Data File Name	095SMPL.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T13:41:34-08:00
Sample Type	Sample
Dilution	1
Comment	500
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Cu	63	He	3.120	0.76	13014	0.02	
Cu	65	He	3.167	1.39	6598	0.05	
Sb	121	He	0.147	22.29	324	0.05	
Sb	123	He	0.149	3.16	261	0.06	
[Pb]	206	He	22.319	2.32	110472	0.02	
[Pb]	207	He	21.200	2.51	93732	0.02	
Pb	208	He	21.651	2.46	439307	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	87003	0.91	78682	110.58	30	120	
In	115	He	757946	0.41	701170	108.10	30	120	
Lu	175	He	2129268	2.41	2054624	103.63	30	120	

Sample Report

Sample Table

Sample Name	K1701359-016
Data File Name	096SMPL.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T13:44:45-08:00
Sample Type	Sample
Dilution	1
Comment	5000
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Cu	63	He	18.027	0.36	73705	0.02	
Cu	65	He	17.851	0.89	36510	0.05	
Sb	121	He	0.412	6.80	779	0.05	
Sb	123	He	0.424	3.23	646	0.07	
[Pb]	206	He	83.616	0.85	425715	0.02	
[Pb]	207	He	81.521	0.30	370775	0.02	
Pb	208	He	82.250	0.18	1716740	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	86191	0.63	78682	109.54	30	120	
In	115	He	759343	0.93	701170	108.30	30	120	
Lu	175	He	2189889	0.13	2054624	106.58	30	120	

Sample Report

Sample Table

Sample Name	K1701359-017
Data File Name	097SMPL.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T13:47:54-08:00
Sample Type	Sample
Dilution	1
Comment	500
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Cu	63	He	2.095	1.10	8900	0.02	
Cu	65	He	2.107	3.27	4467	0.05	
Sb	121	He	0.056	14.18	168	0.03	
Sb	123	He	0.058	38.17	133	0.04	
[Pb]	206	He	16.161	1.28	82950	0.02	
[Pb]	207	He	15.686	0.40	71923	0.02	
Pb	208	He	15.848	0.78	333461	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	88034	0.59	78682	111.89	30	120	
In	115	He	757014	0.87	701170	107.96	30	120	
Lu	175	He	2207119	0.97	2054624	107.42	30	120	

Sample Report

Sample Table

Sample Name	K1701359-018
Data File Name	098SMPL.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T13:51:05-08:00
Sample Type	Sample
Dilution	1
Comment	500
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Cu	63	He	10.910	1.45	44823	0.02	
Cu	65	He	11.122	1.09	22855	0.05	
Sb	121	He	0.732	2.54	1323	0.06	
Sb	123	He	0.747	3.61	1095	0.07	
[Pb]	206	He	198.993	2.91	1002096	0.02	
[Pb]	207	He	190.602	2.18	857605	0.02	
Pb	208	He	200.437	2.14	4138813	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	86491	1.45	78682	109.92	30	120	
In	115	He	756538	0.98	701170	107.90	30	120	
Lu	175	He	2167352	2.85	2054624	105.49	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	099_CCV.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T13:54:16-08:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Cu	63	He	24.936	2.225	103155	2.42	25	100	
Cu	65	He	24.782	0.988	51287	1.45	25	99	
Sb	121	He	25.208	0.406	42974	0.67	25	101	
Sb	123	He	25.138	1.594	35037	1.70	25	101	
[Pb]	206	He	25.035	1.481	127082	0.22	25	100	
[Pb]	207	He	24.919	1.768	112995	1.31	25	100	
Pb	208	He	24.866	1.743	517451	0.41	25	99	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	87265	1.13	78682	110.91	30	120	
In	115	He	754089	0.49	701170	107.55	30	120	
Lu	175	He	2183338	1.68	2054624	106.26	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	100_CCB.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T13:57:26-08:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Cu	63	He	-0.004	-204.6	150	19.8	0.2	
Cu	65	He	0.012	122.6	96	31.7	0.2	
Sb	121	He	-0.015	-6.6	48	2.0	0.2	
Sb	123	He	-0.011	-28.7	37	11.3	0.05	
[Pb]	206	He	0.111	10.5	603	9.3	1	
[Pb]	207	He	0.114	0.4	537	1.1	1	
Pb	208	He	0.106	6.5	2339	5.0	1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	85816	1.01	78682	109.07	30	120	
In	115	He	765480	1.58	701170	109.17	30	120	
Lu	175	He	2191201	1.41	2054624	106.65	30	120	

Sample Report

Sample Table

Sample Name	K1701359-021
Data File Name	101SMPL.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T14:00:36-08:00
Sample Type	Sample
Dilution	1
Comment	50
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Cu	63	He	26.439	1.22	110930	0.02	
Cu	65	He	26.451	1.60	55517	0.05	
Sb	121	He	0.467	6.14	859	0.05	
Sb	123	He	0.437	2.18	655	0.07	
[Pb]	206	He	81.655	1.50	406483	0.02	
[Pb]	207	He	79.222	1.68	352294	0.02	
Pb	208	He	79.867	2.03	1629790	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	88523	1.34	78682	112.51	30	120	
In	115	He	747891	0.74	701170	106.66	30	120	
Lu	175	He	2141735	2.60	2054624	104.24	30	120	

Sample Report

Sample Table

Sample Name	K1701359-021S
Data File Name	102SMPL.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T14:03:49-08:00
Sample Type	Sample
Dilution	1
Comment	50
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Cu	63	He	34.695	0.17	144128	0.02	
Cu	65	He	34.665	0.68	72042	0.05	
Sb	121	He	6.861	0.42	11641	0.06	
Sb	123	He	6.867	1.82	9521	0.07	
[Pb]	206	He	110.414	1.16	554535	0.02	
[Pb]	207	He	107.363	0.88	481712	0.02	
Pb	208	He	108.241	0.79	2228700	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	87671	0.91	78682	111.42	30	120	
In	115	He	747166	0.14	701170	106.56	30	120	
Lu	175	He	2160522	1.64	2054624	105.15	30	120	

Sample Report

Sample Table

Sample Name	K1701359-021SD
Data File Name	103SMPL.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T14:07:00-08:00
Sample Type	Sample
Dilution	1
Comment	50
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Cu	63	He	44.838	0.53	188318	0.02	
Cu	65	He	45.537	0.98	95682	0.05	
Sb	121	He	6.698	1.70	11372	0.06	
Sb	123	He	6.600	1.05	9156	0.07	
[Pb]	206	He	107.664	2.12	539132	0.02	
[Pb]	207	He	105.845	3.38	473401	0.02	
Pb	208	He	106.079	2.89	2177462	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	88662	1.11	78682	112.68	30	120	
In	115	He	747532	0.57	701170	106.61	30	120	
Lu	175	He	2154622	2.31	2054624	104.87	30	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	104_CCV.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T14:10:10-08:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Cu	63	He	24.835	1.337	103810	0.33	25	99	
Cu	65	He	24.974	2.420	52218	1.27	25	100	
Sb	121	He	25.291	1.111	43567	0.80	25	101	
Sb	123	He	24.998	0.928	35207	0.26	25	100	
[Pb]	206	He	25.201	1.751	127072	1.01	25	101	
[Pb]	207	He	25.298	1.213	113954	0.81	25	101	
Pb	208	He	25.114	1.710	519111	0.29	25	100	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	88186	1.53	78682	112.08	30	120	
In	115	He	762037	1.18	701170	108.68	30	120	
Lu	175	He	2168864	2.01	2054624	105.56	30	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	105_CCB.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T14:13:21-08:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Cu	63	He	0.004	122.4	182	11.0	0.2	
Cu	65	He	-0.007	-185.3	58	46.3	0.2	
Sb	121	He	-0.020	-17.4	40	15.0	0.2	
Sb	123	He	-0.018	-43.8	28	39.9	0.05	
[Pb]	206	He	0.098	3.7	544	3.6	1	
[Pb]	207	He	0.099	14.7	479	14.2	1	
Pb	208	He	0.092	6.5	2076	6.3	1	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	86449	0.26	78682	109.87	30	120	
In	115	He	771344	0.76	701170	110.01	30	120	
Lu	175	He	2226546	0.60	2054624	108.37	30	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLCCVS 2X
Data File Name	106_QC1.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T14:16:31-08:00
Sample Type	QC1
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Cu	63	He	0.394	4.601	177S	3.71	0.4	99	
Cu	65	He	0.449	7.269	988	5.49	0.4	112	
Sb	121	He	0.179	5.535	382	4.19	0.2	90	
Sb	123	He	0.192	17.800	324	15.46	0.2	96	
[Pb]	206	He	0.272	5.539	1409	3.92	0.2	136	
[Pb]	207	He	0.280	14.134	1282	13.34	0.2	140	
~~Pb~~	~~208~~	~~He~~	~~0.275~~	~~5.634~~	~~5815~~	~~4.83~~	~~0.2~~	~~137~~	

See 1.4.5.3 2/22/17

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	86206	1.85	78682	109.56	30	120	
In	115	He	764542	0.65	701170	109.04	30	120	
Lu	175	He	2173435	1.48	2054624	105.78	30	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLCCVS 2X
Data File Name	107_QC1.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T14:19:40-08:00
Sample Type	QC1
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

2/23/17

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	QC Flag
Cu	63	He	0.384	4.248	1727	4.11	0.4	96	
Cu	65	He	0.408	11.705	900	10.50	0.4	102	
Sb	121	He	0.163	12.910	356	10.59	0.2	82	
Sb	123	He	0.192	14.242	324	12.05	0.2	96	
[Pb]	206	He	0.254	8.518	1332	8.79	0.2	127	
[Pb]	207	He	0.260	5.188	1206	5.26	0.2	130	
Pb	208	He	0.263	3.762	5628	4.25	0.2	131	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	85850	0.29	78682	109.11	30	120	
In	115	He	765375	0.46	701170	109.16	30	120	
Lu	175	He	2197709	1.10	2054624	106.96	30	120	

Sample Report

Sample Table

Sample Name	LLCCVS 1.0 ppb
Data File Name	108SMPL.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T14:22:50-08:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Cu	63	He	1.057	2.87	4479	0.02	
Cu	65	He	1.074	4.23	2266	0.05	
Sb	121	He	0.989	3.81	1773	0.06	
Sb	123	He	1.055	3.75	1535	0.07	
[Pb]	206	He	1.143	1.52	5854	0.02	
[Pb]	207	He	1.111	3.32	5070	0.02	
Pb	208	He	1.124	1.56	23567	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	86224	0.52	78682	109.58	30	120	
In	115	He	761577	0.58	701170	108.62	30	120	
Lu	175	He	2188867	1.66	2054624	106.53	30	120	

Sample Report

Sample Table

Sample Name	LLCCVS 1.0 ppb
Data File Name	109SMPL.d
Data Path Name	D:\Data\Experiments\022217A.b
Acq Date Time	2017-02-22T14:26:00-08:00
Sample Type	Sample
Dilution	1
Comment	
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

2/23/17

QC Analyte Table

Name	Mass	Tune Mode	Conc	Conc %RSD	CPS	%RSD	QC Flag
Cu	63	He	1.087	2.70	4532	0.02	
Cu	65	He	1.107	3.64	2298	0.05	
Sb	121	He	1.020	2.51	1822	0.06	
Sb	123	He	0.951	2.32	1386	0.07	
[Pb]	206	He	1.124	3.20	5664	0.02	
[Pb]	207	He	1.142	1.95	5130	0.02	
Pb	208	He	1.127	1.56	23271	0.00	

QC ISTD Table

Name	Mass	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	He	84963	0.92	78682	107.98	30	120	
In	115	He	759571	0.37	701170	108.33	30	120	
Lu	175	He	2154783	0.31	2054624	104.87	30	120	

LABORATORY DATA CONSULTANTS, INC.
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ARCADIS U.S., Inc.
401 E. Main Street, Suite 400
El Paso, TX 79901

March 20, 2017

SUBJECT: Fort Bliss, Castner Range, Data Validation

Enclosed is the final validation report for the fraction listed below. This SDG was received on March 6, 2017. Attachment 1 is a summary of the samples that were reviewed for analysis.

LDC Project #38222:

SDG #	**Fraction:**
K1700916	Metals

The data validation was performed under Level III guidelines. The analyses were validated using the following documents, as applicable to each method:

- Final Quality Assurance Project Plan, Military Munitions Response Program Remedial Investigation, Closed Castner Firing Range, Fort Bliss, El Paso, Texas, February 2015
- U.S. Department of Defense Quality Systems Manual for Environmental Laboratories, 5.0, July 2013
- USEPA, Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review, October 2004
- EPA SW 846, Third Edition, Test Methods for Evaluating Solid Waste, update 1, July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III, December 1996; update IIIA, April 1998; IIIB, November 2004; update IV, February 2007; update V, July 2014

Please feel free to contact us if you have any questions.

Sincerely,

EDD 90/10 ADR/IV

LDC #38222 (Arcadis-Millersville, MD / Fort Bliss, Castner Range)

LDC	SDG#	DATE REC'D	(2) DATE DUE	(7) Metals (6020A)																															
Matrix:	Water/Soil			W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S
A	K1700916	03/06/17	03/20/17	0	3																														
Total	T/PG			0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3

Shaded cells indicate Level IV validation (all other cells are ADR validation). These sample counts do not include MS/MSD, and DUPs

L:\Arcadis\Fort Bliss-Castner Range\38222ST.wpd

Data Validation Report
Fort Bliss, Castner Range

SDG: K1700916

Prepared for

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Prepared by

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March 15, 2017

INTRODUCTION

This Data Validation Report (DVR) presents Level III data validation results for samples collected during the January 2017 sampling period. Data validation was performed in accordance with the Final Quality Assurance Project Plan (QAPP), Military Munitions Response Program Remedial Investigation, Closed Castner Firing Range, Fort Bliss, El Paso, Texas (February 2015), the U.S. Department of Defense (DoD) Quality Systems Manual (QSM) for Environmental Laboratories, Version 5.0 (July 2013), and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines (CLPNFG) for Inorganic Superfund Data Review (October 2004). Where specific guidance is not available, the data has been evaluated in a conservative manner consistent with industry standards using professional experience.

The analyses were performed by the following method:

Metals by Environmental Protection Agency (EPA) SW 846 Method 6020A

The sample identification and methods of analyses performed on each sample is presented in Attachment 1. Please note that sample names had to be truncated due to database limitations. Overall data qualification summary is presented in Attachment 2. Level III Automated Data Review outliers are presented in Enclosure I.

All sample results were subjected to Level III data validation, which comprises an evaluation of quality control (QC) summary results for sample holding times, instrument performance check, initial and continuing calibrations, laboratory blanks, initial and continuing calibration blanks (ICB/CCBs), interference check (ICSA and ICSAB) samples, matrix spike/matrix spike duplicates (MS/MSD), serial dilutions, laboratory control sample (LCS), and internal standards.

Automated data review was performed on all QC summary results using the Automated Data Review (ADR) software program (LDC, 2013) with exception of the instrument performance check, calibrations, interference check samples, and internal standards which were validated manually. Quality assurance (QA)/QC criteria specified in the QAPP, DoD QSM and CLPNFGs were incorporated with the program's reference library to assess compliance with project requirements.

The following are definitions of the data qualifiers:

J (Estimated): The compound or analyte was analyzed for and positively identified by the laboratory; however the reported concentration is estimated due to non-conformances discovered during data validation.

U (Non-detected): The compound or analyte was analyzed for and positively identified by the laboratory; however the analyte should be considered non-detect at the reported concentration due to the presence of contaminants detected in the associated blank(s).

UJ (Non-detected estimated): The compound or analyte was reported as not detected by the laboratory; however the reported quantitation/detection limit is estimated due to non-conformances discovered during data validation.

R (Rejected): The sample results were rejected due to gross non-conformances discovered during data validation. Data qualified as rejected is not usable.

NJ (Presumptive): Presumptive evidence of presence of the compound at an estimated quantity.

NA (Not applicable): Data did not warrant qualification since detected results only are affected and the compound was not detected in the associated samples.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

I. Sample Receipt & Technical Holding Times

All samples were received in good condition and cooler temperatures upon receipt met validation criteria.

All technical holding time requirements were met.

II. Instrument Performance Check

Instrument performance was checked at the frequency required by the method.

All criteria for the instrument performance check were met.

III. Initial Calibration and Initial Calibration Verification

All criteria for the initial calibration and initial calibration verifications of the method were met.

IV. Continuing Calibration

All criteria for the continuing calibration verifications of the method were met.

V. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met.

VI. Laboratory Blanks

Laboratory blanks were performed as required by the methods. No contaminant concentrations were detected in the laboratory blanks reviewed by the ADR software with the exception of several metals. The associated sample results were not detected or were significantly greater than the concentrations found in the blanks, therefore no data were qualified. The details are presented in Enclosure I.

No contaminant concentrations were detected in the initial or continuing calibration blanks with the following exceptions:

SDG/ Method	Laboratory Blank ID	Analyte	Maximum Concentration	Associated Samples
K1700916/ 6020A	ICB/CCB	Antimony	0.02 ug/L	FTBL-SED-076-0-6-012817 FTBL-SED-075-0-6-012817 FTBL-SED-074-0-6-012817

Sample concentrations were compared to concentrations detected in the laboratory blanks. The sample concentrations were not detected or were significantly greater than the concentrations found in the associated blanks with the following exceptions:

SDG/Method	Sample	Compound	Reported Concentration	Modified Final Concentration
K1700916/ 6020A	FTBL-SED-075-0-6-012817	Antimony	0.040 mg/Kg	0.040U mg/Kg

VII. Field Blanks

No field blanks were identified in this SDG.

VIII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were performed on an associated project sample. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the exception of antimony in one MS/MSD pair. No data were qualified for antimony MS/MSD %R outside QC limits when the post spike was within QC limits.

IX. Duplicate Sample Analysis

The laboratory has indicated that there were no duplicates (DUP) analyses specified for the samples in this SDG, and therefore duplicate analyses were not performed.

X. Serial Dilution

Serial dilution analysis was performed on an associated project sample. The analysis criteria were met.

XI. Laboratory Control Samples

Laboratory control samples (LCS) were analyzed as required by the method. Percent recoveries (%R) were within QC limits.

XII. Field Duplicates

No field duplicates were identified in this SDG.

XIII. Internal Standards

All internal standard areas and percent recoveries were within QC limits.

XIV. Compound Quantitation

The laboratory reporting limits were evaluated. All laboratory reporting limits met the specified requirements.

All compounds reported below the LOQ as detected by the laboratory were qualified as detected estimated (J). The details regarding the qualification of data are provided in Enclosure I.

XV. Overall Assessment of Data

The analysis was conducted within all specifications of the methods. No results were rejected in this SDG.

Due to laboratory blank contamination, data were qualified as not detected in one sample.

The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable. Based upon the data validation all other results are considered valid and usable for all purposes.

Data flags are summarized and are presented as Attachment 2.

Attachment 1

Sample Cross Reference

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
28-Jan-2017	FTBL-SED-076-0-6-012817	K1700916-001	N	EPA 3050B	6020A	III
28-Jan-2017	FTBL-SED-076-0-6-012817RE	K1700916-001RE	N	EPA 3050B	6020A	III
28-Jan-2017	FTBL-SED-076-0-6-012817MS	KQ1701710-03	MS	EPA 3050B	6020A	III
28-Jan-2017	FTBL-SED-076-0-6-012817MS	KQ1701710-03RE	MS	EPA 3050B	6020A	III
28-Jan-2017	FTBL-SED-076-0-6-012817SD	KQ1701710-04	MSD	EPA 3050B	6020A	III
28-Jan-2017	FTBL-SED-076-0-6-012817SD	KQ1701710-04RE	MSD	EPA 3050B	6020A	III
28-Jan-2017	FTBL-SED-075-0-6-012817	K1700916-002	N	EPA 3050B	6020A	III
28-Jan-2017	FTBL-SED-075-0-6-012817RE	K1700916-002RE	N	EPA 3050B	6020A	III
28-Jan-2017	FTBL-SED-074-0-6-012817	K1700916-003	N	EPA 3050B	6020A	III
28-Jan-2017	FTBL-SED-074-0-6-012817RE	K1700916-003RE	N	EPA 3050B	6020A	III

III = EPA Level 3 Data Review
IV = EPA Level 4 Data Validation
N = Normal Sample
FD = Field Duplicate
TB = Trip Blank
FB = Field Blank
MS = Matrix Spike
MSD = Matrix Spike Duplicate

Attachment 2

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: K1700916 **Laboratory: ALS_K**

EDD Filename: K1700916_SEDD2A **eQAPP Name: Arcadis_FtBliss_ALS_160627**

Method Category: **METALS**

Method: **6020A** ***Matrix:*** **Soil**

Sample ID: **FTBL-SED-075-0-6-012817RE** ***Collected:*** **1/28/2017 8:30:00 AM** ***Analysis Type:*** **Reanalysis-1** ***Dilution:*** **5**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
ANTIMONY	0.040	J	0.025	LOD	0.050	LOQ	mg/Kg	U	Cb

* denotes a non-reportable result

Project Name and Number: 06261038.0001.00400 - Closed Castner Firing Range

Data Qualifier Summary

Lab Reporting Batch ID: K1700916 **Laboratory: ALS_K**

EDD Filename: K1700916_SEDD2A **eQAPP Name: Arcadis_FtBliss_ALS_160627**

Reason Code Legend

Reason Code	*Description*
Cb	Calibration Blank Contamination
Mb	Method Blank Contamination
Ms	Matrix Spike Lower Estimation
RI	Reporting Limit Trace Value

* denotes a non-reportable result

Project Name and Number: 06261038.0001.00400 - Closed Castner Firing Range

Enclosure I

Level III ADR Outliers

(Including Manual Review Outliers)

Quality Control Outlier Reports

K1700916

Method Blank Outlier Report

Lab Reporting Batch ID: K1700916 **Laboratory: ALS_K**

EDD Filename: K1700916_SEDD2A **eQAPP Name: Arcadis_FtBliss_ALS_160627**

Method: **6020A**
Matrix: **Soil**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
KQ1701710-01	2/21/2017 12:56:00 PM	BERYLLIUM	0.007 mg/Kg	FTBL-SED-074-0-6-012817
		COPPER	0.09 mg/Kg	FTBL-SED-074-0-6-012817RE
		NICKEL	0.03 mg/Kg	FTBL-SED-075-0-6-012817
		ZINC	0.22 mg/Kg	FTBL-SED-075-0-6-012817RE
				FTBL-SED-076-0-6-012817
				FTBL-SED-076-0-6-012817RE

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: K1700916 **Laboratory: ALS_K**

EDD Filename: K1700916_SEDD2A **eQAPP Name: Arcadis_FtBliss_ALS_160627**

Method: **6020A**
Matrix: **Soil**

QC Sample ID (Associated Samples)	*Compound*	*MS %R*	*MSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
FTBL-SED-076-0-6-012817MS (Dry) FTBL-SED-076-0-6-012817MSD (Dry) (FTBL-SED-076-0-6-012817)	ANTIMONY	59	62	72.00-124.00	-	ANTIMONY	No Qual, Post Spike = 102%

Reporting Limit Outliers

Lab Reporting Batch ID: K1700916 **Laboratory: ALS_K**

EDD Filename: K1700916_SEDD2A **eQAPP Name: Arcadis_FtBliss_ALS_160627**

Method: **6020A**

Matrix: **Soil**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
FTBL-SED-075-0-6-012817RE	ANTIMONY	J	0.040	0.050	LOQ	mg/Kg	J (all detects)

Project Name and Number: 06261038.0001.00400 - Closed Castner Firing Range

3/15/2017 9:20:15 AM ADR version 1.9.0.325

LDC #: 38222A4a
SDG #: K1700916
Laboratory: ALS Environmental

VALIDATION COMPLETENESS WORKSHEET
ADR

Date: 3/14/17

[redacted]

METHOD: Metals (EPA SW 846 Method 6020A)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A /N	
II.	ICP/MS Tune	A	
III.	Instrument Calibration	A	
IV.	ICP Interference Check Sample (ICS) Analysis	A	
V.	Laboratory Blanks	SW	ICB/CCB only
VI.	Field Blanks	N	
VII.	Matrix Spike/Matrix Spike Duplicates	N	(4/5) Sb MS/D out, PS = 102%, No Qual
VIII.	Duplicate sample analysis	N	
IX.	Serial Dilution	A	
X.	Laboratory control samples	N	
XI.	Field Duplicates	—	
XII.	Internal Standard (ICP-MS)	A	
XIII.	Sample Result Verification	N	
XIV.	Overall Assessment of Data	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank; SB=Source blank; OTHER:

	Client ID	Lab ID	Matrix	Date
1	FTBL-SED-076-0-6-012817	K1700916-001	Soil	01/28/17
2	FTBL-SED-075-0-6-012817	K1700916-002	Soil	01/28/17
3	FTBL-SED-074-0-6-012817	K1700916-003	Soil	01/28/17
4	FTBL-SED-076-0-6-012817MS	K1700916-001MS	Soil	01/28/17
5	FTBL-SED-076-0-6-012817MSD	K1700916-001MSD	Soil	01/28/17
6				
7				
8				
9				
10				
11				
12				
13				

Notes:

LDC #: 38222A4a

VALIDATION FINDINGS WORKSHEET
Sample Specific Element Reference

[redacted]

All circled elements are applicable to each sample.

Sample ID	Matrix	Target Analyte List (TAL)
1-3		Al, (Sb), As, Ba, (Be), Cd, Ca, Cr, Co, (Cu), Fe, (Pb), Mg, Mn, Hg, (Ni), K, Se, Ag, Na, Tl, V, (Zn), Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
QC 4-5		Al, (Sb), As, Ba, (Be), Cd, Ca, Cr, Co, (Cu), Fe, (Pb), Mg, Mn, Hg, (Ni), K, Se, Ag, Na, Tl, V, (Zn), Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
Analysis Method		
ICP		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
ICP-MS		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___
GFAA		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Sn, Ti, ___ ___

Comments: Mercury by CVAA if performed

LDC #: 38222A4a

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

[redacted]

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000) Soil preparation factor applied: 100x x 5xdil
Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: ~~1-2~~ 9 11

				Sample Identification										
Analyte	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Level	2										
Sb		0.02	0.05	0.040										

Sample Concentration units, unless otherwise noted: ~~mg/Kg~~ ug/Kg Associated Samples: 3

				Sample Identification										
Analyte	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Level	No qualifiers (>5x)										
Sb		0.02	0.05											

Samples with analyte concentrations within five times the associated ICB, CCB or PB concentration are listed above with the identifications from the Validation Completeness Worksheet. These sample results were qualified as not detected, "U".
Note : a - The listed analyte concentration is the highest ICB, CCB, or PB detected in the analysis of each element.